DOCUMENT RESUME

ED 213 432 IP 010 078

AUTHOR	Bradler, Reinhard; And Others
TITLE	International Federation of Library Associations Annual Conference. Papers of the Management and Technology Division: Information Technology Section (47th, Leipzig, East Germany, August 17-22, 1981).
INSTITUTION	International Federation of Library Associations, The Hague (Netherlands).
PUB DATE	Aug 81
NOTE	105p.
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Administration; Archives; Cataloging; Foreign Countries; Information Centers; International Programs; *Libraries; *Library Administration; *Library Associations; Library Automation; Library Materials; *Library Networks; *Online Systems; State Programs
IDENTIFIERS	Czechoslovakia; East Germany; *Library Development; Libya; MARC; *National Bibliographies; USSR; West Germany

ABSTRACT

These seven papers on library management and networks focus on: (1) computerized access to archival and library materials, describing the methodological problems associated with a pilot project in the German Democratic Republic, as well as the efficiency of data bank systems; (2) present and future development of libraries and information centers in the Jamahiriya (Libya), providing statistics such as student population and library users, describing various library types and listing recommendations to improve the library situation; (3) library networks in the Federal Republic of Germany, emphasizing their application functions and software and database design requirements; (4) an international MARC network, focusing on issues confronting such a network and priority needs for research and development; (5) management system of librarianship in the Soviet Union, including its development, the state's influence, and the responsibilities of the State Interdepartmental Library Committee; (6) management and technology in library associations, centering on the utilization of modern management methods and new information technology to improve services to members; and (7) a state program of bibliographic development in Czechoslovakia, and a report on an international symposium on national bibliography automation. Provided are 20 references and five tables in three papers. (RBF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED213432

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS

47th Annual Conference Papers

Management and Technology Division:
Information Technology Section

BEST COPY AVAILABLE

IR010078

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Carol Henry
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IFLA Council 1981

DIVISION: Management and Technology

SECTION: Information Technology

31/INF/1E

Computerized Access to both Archival and Library Materials

by
Reinhard Bradler
Director of Division, German State Library,
Berlin, GDR

1. Introduction

The UNESCO General Information Programme includes an interesting pilot project: the development of a unified system in order to guarantee computerized access to both archival and library material. The demands made on this project have been very high since on the one hand archival and library material cover a great variety of information sources (manuscripts, documents, maps, films, slides, sound carriers, printed music, periodicals, monographs etc.) and on the other hand principles for description of these material are different at archives and libraries.

The Deutsche Staatsbibliothek expressed its willingness to draw up the pilot project in collaboration with the Staatliche Archivverwaltung of the GDR. Last year the two institutions set up a mixed working group composed of 14 librarians, archivists and computer experts. At first the working group had initiated a study which was completed on September 30, 1980 and submitted it to the UNESCO. The study was called "Feasibility study on a system providing computerized access to both archival and library materials".

The "Feasibility study ..." is property of the UNESCO, therefore we are not entitled to speak on behalf of the UNESCO. Thus in the following we will be referring to our own ideas on the pilot project.

In our opinion it will be advisable to distinguish between two complexes of problems. The first one includes methodical problems and examines possibilities of applying the principles of the "International Standard Bibliographic Description" (ISBD) to archival materials or finding a compromise. The second complex refers to the efficiency of data bank systems. Regarding these systems we have to raise the question if one data bank system only may satisfy archivists, librarians and all the end-users and may be efficient as well.

2. Methodical problems

2.1. Formal description of information sources

Librarians have succeeded in drawing up international standards for the formal description of library material. In a relatively short time several editions of the ISBD have been established. The development of the ISBD has involved many difficulties, and we know that this development has not been completed yet. However, the advance achieved and the success made have been remarkable. On the basis of the ISBD national and international standards had been designed being prerequisites for cataloguing. Theses descriptions represent an almost unified formal description of information sources of libraries' collections.

Successes made in this way have been convincing. Several countries do not only apply the principles of ISBD to libraries but to information centres as well thus offering advantages for users but also contributing to a better communication of librarians and information specialists. It could be of great advantage if the archivist went to the librarian and the information specialist saying according to Friedrich Schiller ("T if mind your suppliant how tobe, A, let the end oflove be THREE!"
That means to examine the possibility of applying the principles of the ISBD in whole or in part to archives.

Kind and number of the data considered to be necessary for formally describing archival materials are different on international, regional and frequently national scale. There are not any international principles for cataloguing and classifying archival materials comparable with the principles of the ISBD. Maybe this circumstance is advantageous to the objectives of the pilot project rather than impeding.

There are principles of classifying and cataloguing in the GDR (OVG) applied to both state archives and other archives. In addition there are the well-known regulations for alphabetic cataloguing (RAK) established for German-speaking countries and based upon the ISBD. In this way there have been some fundamentals presuming to launch our activities. At the very beginning we had to get a general idea of the existing methodical difficulties and to know if there were possibilities of their overcoming.

The difficulties touch on a point which will be familiar to librarians. Archivists must try to define the term "document" with the aim of establishing an independent formal (and with regard to its contents) description. This problem is similar to the precise definition of the term "item" within AACR2 and the definition of the term "edition of a publication" within RAK. It may be more difficult for archivists to solve this problem than it has been for librarians. In the course of time the arrangement and form of archival materials have been subject to changes rooting in social and historical contexts. Therefore both assessing criteria of previous social orders have to be taken into consideration and differences of present social orders.

A comparison of regulations applied in the GDR with those applied in west-European countries revealed basic similarities. Thus we hope that we may come to a regional or even an international agreement on criteria concerning the formal description of archival material. We have to take into account that the process of the archivists' coming to an agreement requires much time, and at present nobody knows if at the end of this process there will be a kind of "ISBD for archival material".

Form our point of view it will be of great advantage to study the regulations applied in the most essential countries in order to prevent the pilot project from being influenced

by an unending stage of development from the very beginning. It goes without saying that in this respect already established international standards and recommendations as well as identifiable trends of development will be considered. Thus a pilot project should come into being suited to demonstrate the efficiency of a unified system formally describing archival and library materials and we only hope that international experts will accept our solution as a solid basis for further discussion.

2.2. Description of information sources with regard to their contents (=subject indexing)

There are no unified regulations for describing information sources with regard to their contents on international, regional or national level. This is true both for archives and libraries. Regarding archives two entirely different principles of arrangement are applied to archival materials throughout the world; moreover there are mixed forms. This situation does not only influence the formal description of archival materials but also the description with regard to its contents. Within librarianship there is a slightly different situation; almost all the familiar methods of subject indexing are applied such as subject heading systems, descriptor systems, classification system etc. Descriptor systems are also applied to some archives.

Recently the UNO published a "Bibliography of United Nations Thesauri, Classifications, Nomenclatures" but neither one of the systems shows general characteristic features nor are they applied universally throughout the world. The same holds true for the "Library of Congress List of Subject Headings"; though it was translated into several languages it is not applied in general. In this respect mention must be made of a general difficulty, i. e., usually it is quite difficult to

develop multilingual information-research-systems, even if they are limited to one field of science only from the very beginning. To make matters worst archives and libraries are frequently not as specialized in particular fields as information centres. Therefore the level of subject indexing is usually lower at large archives and libraries than at information centres (it goes without saying that exceptions prove the rule).

Regarding this situation we cannot expect for the moment a unified method of subject indexing to be applied universally but we feel that a compromise may be found by means of data-processing. With respect to methodical aspects it does not matter so much to apply so-called "fact retrieval systems" but "document retrieval systems" thus facilitating the solution of the problem. How many compromises may be admitted depends on the efficiency of the data-processing system.

3. Data-processing

During the last decades archivists and librarians were able to convince themselves of the advantages of data-processing; which advantages may, however, be derived from data-processing depends on the question if "batch mode" may be used exclusively or if "dialog job processing" will be possible. Dialog job processing system are more expensive than batch mode systems but they are of greater advantage to archivists, librarians as well as to users to archives and libraries.

Dialog job processing requires the existence of a data bank system. The different possibilities of a data bank system are basically influenced by the data bank operating system available. There are some efficient data bank operating systems spread to certain extent such as IMS, STAIRS, ADABAS and STATUS. But from our point of view a still more efficient

data bank operating system should be developed. We wanted to solve three basic problems:

a) It is typical of archives and libraries that their collections are subject to constant changes. Therefore data bases have to be supplemented and changed every day resulting up to now in disturbed orders of data bank systems. Finally the system can-not operate efficiently any longer. Data bank systems had to be reorganized at regular intervals, and this reorganization is a very troublesome process. We developed a data bank system avoiding such difficulties. Any changes and supplementations can be made with regard to the data base every day and for many years without reorgarization required.

b) In order to make a quick access to data elements required possible it is necessary to define so-called "key words". Data bank operating systems set up internal index tables for these key words including adequate storage location addresses. Up to now applied data bank systems, however, did not permit any length of key words. Usually a fixed word length of four to eight characters was provided. We have overcome this difficulty. Our system permits, for example, a title as key word for quick access even if the title has more than 1,000 characters.

c) The third problem refers to the portability of the system, i. e. that the data bank system may be implemented on any hardware. We had to consider that hardware is different on international scale, and we had also to take into consideration that there will be different computers and basic operating systems in the year 2,000 which we do not know anything of at present. Therefore it was our intention to design a data bank system which can be applied to any computer system, and we succeeded in solving this problem.

Finally there is a fourth problem which, from our point of view, attention has to be paid to. By no means this problem had to be solved within the framework of a data bank operation system but in a different way.

d) Consideration had to be taken to the fact that every user of the data bank system would show a different standard of education: computer experts, archivists, librarians, scientists, students and laity. Experiences made in other countries demonstrated the complexity of training different user groups in order to become "sophisticated users" finally. At the same time this training process is very expensive. Therefore international experts have frequently expressed their wish to have a dialog language available without special training courses being conducted for users. Regarding our team there was no wish but a request "On the user level of an information system the language standard will be accepted as quality feature on which sentences of search language may be formulated for unsophisticated users". We solved this problem by means of the theory of formal languages in developing and applying contextfree and attributed grammar.

We are really happy that we could manage to solve the abovementioned rather difficult problems in an elegant manner. The solutions offer the possibility of not having to apply far too exacting standards to the solution of methodical problems; we may be somewhat more generous and flexible.

3. Summary

The pilot project promoted by the UNESCO makes heavy demands on the qualification and creativity of the team responsible for it. Even the officials of the UNESCO HQ had not been sure from the very start if there could be a reasonable solution.

On the basis of our successes made in the meantime all people concerned may be fairly optimistic. We feel that at least a practicable compromise will be possible. By the way, our successes made up to now show that even medieval manuscripts will be accessible by means of data bank technology.

We would be very pleased if this paper aroused some hope in your hearts. Who wants to be successful who has to be an optimist; he must have confidence in other people's abilities, and he must try to understand other people's problems.

8 (6)

IFLA Council 1981

DIVISION: Management and Technology

SECTION: Information Technology

33/INF/4E

Development of Libraries and Information Centers: Present and Future in the Jamahiriya

by
Abubaker M. El-Hush
Lecturer of Library Science
University of Al Fateh
Tripoli, Libya

Ag 518/2/3.81

Introduction

The Jamahiriya lies in North Africa with about 2000 kilometers of coast on the Mediterranean Sea. To the east lies Egypt; to the south lie the Sudan, Chad, Niger and Algeria. To the west the Jamahiriya is bordered by Algeria and Tunisia. The total area of the Jamahiriya is about 1,775,500 square kilometers and it is inhabited by approximately 3,100,000 persons.

It is considered to be the fourth largest country on the African continent. This vast area is composed of coastal plains, hills, mountains and far stretching deserts. The Libyan coastal plain is characterized by fertile lands and density of population. 57% of the population live in Tripoli, Benghazi and Zawia, distributed as follows : 31% in Tripoli, 14.5% in Benghazi and 11% in Zawia.[1]

As for education, it is compulsory and free of an kind of charge, and compulsory education extends through the preparatory stage.

Schools increased in number from 1279 in 1968-1969 to 3608 in 1978-1979 and the number of pupils increased from 325,483 to 904,747 in the same period.

The number of students in universities and other institutions of higher education in 1968-1969 was 2522 and in 1977-1978 was 14,990.

The ratio of the number of students in 1978 to the whole population of the country is 32.4%.[2]

Ordinary and Developmental Budgets for Education and Information & Culture, 1978-1980 (in millions of Libyan dinars):

Fiscal Year	Education		Information & Culture	
	Ordinary	Development	Ordinary	Development
	b	B	B	B
1978	203.500	122.000	3.800	24.500
1979	213.500	87.200	2.900	22.400
1980	224.600	135.000	14.000	30.400

(Source: 24th Annual Report: Central Bank of Libya. Tripoli, 1980, pp. 67-69.)

I. Planning and Information Sources

Economic and social planning depend to a large extent upon the availability of an effective library and information system to provide different types of information sources necessary to support the current research in the country. The political system in the Jamahiriya depends on the direct popular authority. The people exercise their authority through the Popular Congresses, People's Committees, syndicates, unions, professional associations and the General People's Congress. These political, social and cultural organizations require a comprehensive information network which has to make information available to all the masses who own power and are decision makers. Now what sort of information network is available in the Jamahiriya?

The question of information and its network is highly important in any country ruled by the known systems of traditional governments in the East and West; while in the new form of government, the Jamahiriya or People's authority presently in action in Libya, information and its network are extremely improtant because the authority of the masses can be successful only if information of all types is made available

to the masses.

Such a library system is very important in the Jamahiriya as it provides the required information to the masses as well as to scholars who are planning as well as building all types of industrial and agricultural projects. Therefore, the success of the Jamahiriya depends upon the availability and use of information.

The fulfillment of these objectives is, more or less, the responsibility of librarians. This is not an easy task, especially in a developing society where illiteracy and the lack of scientific attitudes were dominant not long ago, in addition to the lack of awareness of information and its value. On the other hand, information technology is new to Libya, and the majority of educated Libyans are unable to use libraries and literature effectively to find the knowledge they look for. In addition to all these problems, library collections are not organized well enough so that the educated public can benefit from them effectively.

These points are the real challenge to Libyan librarians, and they have to facilitate these problems in order to be able to enhance the development process through the transition period.

The summary of the philosophy of education proposed by Colonel Muammar Al Qadafi states that universities and higher institutions should be specialized with technical and professional education, while the theoretical part or the liberal education should be left to libraries. This proposition has been under discussion since the beginning of this year.

This paper is a review of the current state of libraries, and documentation and information centers; then it tries to provide some recommendations necessary for the development of the situation, so that libraries and information centers may be able to cope with their new responsibilities.

II. Libraries in the Jamahiriya

A short review of Libyan history shows that libraries were very important throughout this history. During the Hellenistic era, Callimachus, the famous scholar and librarian, was from Cyrenaica in Libya. In the Roman era, Libya contributed the famous Emperor Septimus Severus, who was born in Leptis Magna in Libya.

During the Islamic history, Tripoli was one of the cultural centers in North Africa and especially in the second Abbasid period, when three types of libraries--mosque, school and "Ribat" libraries--developed. In the second half of the nineteenth century, a library of forty thousand books, mainly manuscript in nature, was established at Jaghboob by the Sunusies, and later on it was transferred to El-Kufra.

The modern public library movement in Libya started when a library endowment was established by Mr. Mustafa Al-Katib in Tripoli in 1897. This was followed by the establishment of the Tripoli Public Library in 1917 and later it was renamed after Mr. Mustafa Qadri Ma'aroof, a Libyan scholar. These two libraries are still in operation. During the first half of the current century, libraries in Libya had poor staff, collections, furniture and buildings. In 1959,

there were only six public libraries in the whole country. In 1961, a new type of public library was established by the Ministry of Information and Culture. These libraries are called cultural centers and they have the same objectives and functions of public libraries except that they provide some social services besides the regular library services.

III. Public Libraries and Cultural Centers

Currently there are 174 public libraries and cultural centers providing library services in Libya.[3] Thirty per cent of them organize different cultural and social activities, such as lectures, seminars, discussions of books, exhibits, poetry contests and movies which are available to all citizens and institutions.

The following table indicates the numbers of these services, users and books acquired and added to the collections:

Year	No. of Public Libraries and Cultural Centers	No. of Users	No. of Books Added
1969	68	279.910	33.940
1970	73	651.814	39.731
1971	76	876.193	54.535
1972	91	1089.525	64.712
1973	113	1160.270	110.000
1974	127	1300.200	137.000
1975	144	0908.940	154.000
1976	157	1389.668	
1977	166	2001.794	
1978	172	1558.966	
1979	173	1307.612	
1980	174		

In addition to the above mentioned services of the public libraries and cultural centers, bookmobiles are other service agents. They extend the same activities to the citizens who live in remote communities and to nomads.

Book lending stations are other sources of library services. They are set up wherever and whenever community members request them. In this case, public libraries deposit part of their collections in some public buildings for circulation. These stations started in 1976 to meet the needs of the local readers. Yet there are numerous problems, some of which cannot be settled with money, and these problems were mentioned in a previous report (dated 1973):[4]

1. The country is sparsely populated and it is so huge that cultural services cannot be provided adequately to all.
2. Most of the libraries are housed in buildings which were not meant to be library buildings.
3. Lack of professional librarians is an impediment. (Yet, this problem will be alleviated as the present library school graduates increase in number, and the first class finished in June 1980.)
4. The furniture, film projectors and other equipment are not up-to-date and do not meet the required specifications.
5. Acquisition of books and other library materials is slow and the procedures for it are unsatisfactory.
6. Mobile libraries are quite necessary in a country like Libya. Yet, they are far below the requirements quantitatively and qualitatively.

7. Public library standards, regulations and by-laws are currently inadequate.

IV. School Libraries

This type of library used to be administered along with the public libraries by the Ministry of Education. Later on, the Ministry of Culture and Information became in charge of public libraries and cultural centers. A School Libraries Department was established by the Ministry of Education to manage, supervize and maintain this type of library, as well as to be responsible for the acquisition of all library materials and furniture.

The following statistics document the current number of school libraries in the country:[5]

Type of School	No. of Libraries
Elementary School	382
Elementary and Junior High Schools (under one administration)	231
Junior High Schools	214
Junior and Senior High Schools (under one administration)	056
Senior High Schools	061
Teachers' Colleges	065
Religious Education Schools	015
Technical Institutions	006
Total	1030

Currently, these libraries are unable to provide any effective services due to the lack of qualified librarians or teachers with some library training so that they may facilitate the problem of library use; the second problem

is the poor library collections, the largest of which does not exceed seven thousand titles; the third problem is that there is no correlation between the school curriculum and the collections, which have been built haphazardly; the fourth problem is the poor library buildings and furniture. Therefore, these libraries do not contribute to the educational process at all. This poor situation is very clear to all administrators and leaders. According to the new educational policy in the country, which dictates that schools and all types of institutions should be confined to technical and professional education, while the theoretical subjects like social sciences and humanities should be left to all types of libraries (including school libraries) to cope with, the development of libraries and library networks is a must. This is a good opportunity for Libyan librarians to form an effective library development program which guarantees a comprehensive information network making use of modern technology, theory of information, computer science and theories in library and information sciences. In this way, they can provide all Libyan communities and individuals with their educational needs and interests.

V. Special Libraries and Research Centers

These libraries are established to support the numerous projects and to provide the necessary information for the experts, administrators, and all those who are connected with projects. These information services are provided by some forty research centers and special libraries in a variety of subject areas, such as law, finance and banking, education,

agriculture, technology, criminology, economic development, petroleum, Libyan history, administration, planning, commerce, archeology, etc. These libraries suffer from the same problems that other libraries do.

VI. University Libraries

There are two universities in Libya: Gar Younis in the city of Benghazi and Al Fateh in Tripoli. Each one has its central library and department libraries as well.

Currently, Al Fateh University maintains ten faculty libraries. Two of them, the central library and the science library, are housed in the same building. The former was established to enhance information services all over the campus.

The faculty libraries are very weak, full of duplications, and waste of effort and money is very great. They do not meet the main objective of university libraries, which is to support research. Each of these ten libraries has its own administrator, is attached directly to the Secretary of the People's Committee in the department and has no cooperation with other libraries. Individual libraries do their own acquisitions, cataloging and classification, and there are no interlibrary loans. The most developed of the eleven libraries is the central library, which was established in June 1972 to improve library services on the campus. However, the library did not turn out to be an effective tool to integrate library services or to coordinate their efforts. It was supposed to provide the missing reference service on campus, but it has been unable to build such a collection,

and this service is lacking on this modern campus. A proposed solution to this poor library situation is a new building for the central library. Currently, the plan is under discussion, and construction on the building will start soon. In the mid-eighties, it will be ready for use. Then the central library may be able to play a leading role in providing modern library services. The following table indicates the collections in the libraries at the University of Al Fateh:[6]

Library Name	Arabic Books	Foreign Language Books	Periodicals	Year Started
Central Library	23,643	14,548	487	1973
Education	41,662	21,241	317	1965
Agriculture	3,000	23,136	887	1968
Science	900	33,000	1,500	1957
Engineering		40,000	500	1961
Medicine		10,414	350	
Petroleum and Mining		3,884	300	
Pharmacy	50	7,000	172	1975
Veterinary Science		3,575	150	1975
Nuclear Engineering		2,932	37	1979

This table indicates that the collections of these libraries are very poor. Furthermore, as this study has indicated, these libraries are in need of coordination of services and cooperation. The Gar Younis University libraries, on the other hand, are well established and in much better condition

than those of Al Fateh.

VII. The National Library

It has been decided by the Libyan authorities that there should be two national library buildings in the country: one in Tripoli and the other in the city of Benghazi. Experts were invited to Libya and blueprints were made for these two buildings. In the end, work started and proceeded in Benghazi, where the building has been completed and furnished. It is expected that this national library will be inaugurated during the coming September of 1981.

Mr. Frazer G. Poole, the consultant of the Libyan National Library, has submitted in February 1979 his second report about the problems of its organization, staffing, operating procedures, public services, technical services and budgeting. "It must be noted here," Mr. Poole wrote in his report, "that the Benghazi National Library building, which has been completed early in 1978 and its furnishings and other equipment installed during Dec. 1978-Dec. 1979, is not an adequate building for a national library. The building cannot house the ultimate staff, collection or seating that will be required if it is to fulfill its functions and obligations as a National Library."[7]

VIII. Bibliographical Activities

Some special libraries issue subject bibliographies, and the Secretariat of Culture and Information publishes the National Bibliography of Libya, which has been published annually since 1972. But this tool cannot be considered

as a complete list of Libyan publications due to the absence of a depository law.

The responsible Libyan authorities have already decided to establish a Libyan Bibliographic Control Center consisting of two departments: one for monographs and the other for serial publications. This department is going to use automation and modern technology. Such information technology will be adopted soon by libraries at Al Fateh and Gar Younis Universities, by some other special libraries and research centers in the country, and mainly by the Administrative Committee for Revolutionary Information. However, all these attempts are still at the planning stage.

The literary output in the Jamahiriya is constantly increasing, and the following table provides statistics of book production by subjects for the period, 1972-1979:

Subjects	1972	1973	1974	1975	1976	1977	1978	1979
General Information	7	9	14	10	19	5	8	7
Philosophy and Psychology	2	6	5	3	4		6	3
Religions	9	20	27	12	8	10	14	8
Social Sciences	125	169	130	120	127	219	234	211
Linguistics	1	2	9	7	12	23	8	14
Pure Sciences	3	6	29	9	43	22	30	39
Technology	15	42	29	43	54	55	71	82
Arts	2	12	11	13	3	11	13	21
Literature	27	32	33	30	37	115	147	141
History and Geography	46	94	61	30	26	28	34	43

IX. Prospects and Recommendations

Generally speaking, Libyan libraries have not yet been systematically surveyed. In 1973, a committee was organized to plan for public library development. As a result of its study, a report was raised urging the improvement of the library situation in the country and hoping that that situation would not last long if the Government adopted the committee's plan, which included the following recommendations:[8]

1. "A public library is to be established in every community populated by five thousand citizens or more. The smaller communities will be served by bookmobiles." (In this respect, almost all towns and other communities populated by five thousand or more are served by either a public library or a cultural center.)
2. "A minimum of thirty public libraries will be established annually to meet the citizens' needs." (This recommendation does not coincide with what has been accomplished.)
3. "Each of these libraries will be provided with at least five thousand books and manned by qualified librarians to provide library services, morning and evening." (This recommendation was realized with respect to building collections.)

Currently, the Department of Cultural Affairs of the Administrative Committee for Revolutionary Information is in

process of devising a plan for the development of public libraries and cultural centers. This will be as a part of the general five-year plan providing for the social and economic change in the country.

During the last five-year plan (1976-1980), 79 public libraries and cultural centers were supposed to be established. The current five-year plan (1981-1985) includes the establishment of 25 large cultural centers, i.e., one center for each of the 25 municipalities which compose the different jurisdictions in Libya. The rest of the small cultural centers and public libraries will be branches for the large centers, or there will be an information network in each of the 25 municipalities of the country. These local library networks could be parts of a national network covering all types of libraries in the country. Such a plan will provide equal educational opportunities to all citizens, and this is the main objective of the Jamahiriya, which means people's authority. The other functions of the large cultural centers are:

1. Establishment of interlibrary loans
2. Managing the mobile libraries serving the small communities in the country
3. Establishing and maintaining book lending stations wherever they are needed.

In 1976, the Jamahiriya requested UNESCO to send a library expert to study the library situation in the country. The expert was Mr. Parker, who made a report for the development

of all types of libraries after touring the country for one month.[9] This report stated the necessary objectives for a national information system (NATIS), but his recommendations were not quite reflective as he was unable to get all the necessary data, and consequently the report was impractical.

Currently, the responsible people realize that there should be an effective library system covering the whole country. Such an idea was repeatedly mentioned in the National Conference for the Transfer of Technology organized by the Arab Development Institute in Tripoli, Jan. 24-26, 1981.[10] It was recommended that the development of effective information centers in the country is urgent at this transitional period in the history of the Jamahiriya.

The current five-year plan includes a comprehensive study concerning libraries and information resources in the country. This is a prelude to the development of a national library network, which is a part of the master plan for the development of the whole country.

Currently, there is a national committee of librarians and information specialists who are required to perform a survey of all types of libraries and their services and then to make an evaluative report of the current situation of these institutions with regard to staff, buildings, collections, organization, etc.

This committee will recommend that library development for the whole country make use of modern technology so that the different needs of the reading public can be met. Then

Libyan librarians can play an important role in the current social and economic changes proceeding in the country. Since the speaker is a member of this committee and a long-time librarian, he foresees that the following recommendations are going to be the guide lines for any library development:

1. The main reason behind the current poor library condition in Libya is the lack of qualified librarians of Libyan nationality. This persistent problem will live with us for the next ten years. It is expected that some 500 Libyans with Bachelor's degrees in library science will graduate from the present Department of Libraries and Information at Al Fateh University by the end of the current five-year plan (1981-1985). This will alleviate the crises, as there will be one librarian for every seven thousand Libyans. However, this number will not satisfy the country's need for librarians who will be able to run the public as well as the school libraries effectively. Therefore, there should be other types of library education programs, such as in-service training for those who have the potential to become good librarians.

2. As for university libraries, there should be cooperation in building library collections on the two campuses in Libya, Gar Younis and Al Fateh. This is the way for building rich library resources in the country, besides completing the necessary union catalogs, which will help their patrons to have access to better resources.

Currently, a union list of serials is very urgent. Then follows the main union card catalog covering all library resources, with all documents published in Libya.

3. It is necessary to adopt the same library techniques and procedures with consistency in all Libyan libraries, especially in acquiring documents which are very difficult to get. In this way, duplicates will be cut to the minimum and information sources in the country will be improved.

4. It is recommended that one central technical processing department should be established to serve all public and school libraries with the cultural centers, due to the lack of qualified librarians.

5. Library resources should include all types of publications, such as book and non-book materials and the development of all types of library services making use of modern technology. Currently, the new media are non-existent in Libyan librarians. This is not because of poor library budgets, but mainly because of negligence. Therefore, the new librarians should be trained in the use of information technology for better library services. In this respect, Mr. J. S. Parker, the UNESCO expert, wrote :[11]

"It is advised that automated library systems should be introduced in major libraries only after the completion of detailed feasibility studies. Such systems should be carefully designed to achieve the greatest possible degree of mutual capabilities."

6. Interlibrary loans should be accepted and agreed

upon by all libraries so that readers can benefit from the meager library resources in the country. Such services will enhance library activities and the educational process in Libya. Therefore, a library committee should be established to enact and supervize regulations and programs for all libraries to follow. In this way all library collections and services should be integrated for better information services all over the country.

References

1. Foreign Affairs Secretariat: facts and figures. Tripoli: Socialist People's Libyan Arab Jamahiriya, 1977. P. 11.

2. Data taken from Educational Statistical Office. Secretariat of Education, Tripoli. May, 1979.

3. Secretariat of Information and Culture: Features of the Cultural Development in the Jamahiriya. Tripoli, 1979. P. 51 (in Arabic).

4. The Final Report of the Public Library Services Committee. Tripoli: Ministry of Information and Culture, 1973.

5. Data kindly given to the author by the School Library Section of the Secretariat of Education, March, 1981.

6. Data collected by the author from the librarians in charge of these libraries in March, 1981.

7. Poole, Frazer G. Libyan National Library: Organization, Development and Management. 1978. P. 15.

8. The Final Report of the Public Library Services Committee. Tripoli: Ministry of Information and Culture, 1973.

9. Parker, J. C. Development of Documentation, Library and Archives Services in the Libyan Arab Republic. Paris: UNESCO, 1976.

10. This was mentioned in these two papers:
    A. Knowledge Utilization as an Aspect of Modernization in the Libyan Society. By Ali Hawat.
    B. A Proposal to Reorganize the Scientific Research and Colsultative Activities in the Jamahiriya. By Omer S. Hammuda.

11. Parker, J. C. Development of Documentation, Library and Archives Services in the Libyan Arab Republic. Paris: UNESCO, 1976.

IFLA Council 1981

DIVISION: Management and Technology

SECTION: Information Technology

35/INF/2E

Library networks in the Federal Republic of Germany

by
Christine Bossmeyer
Deutsche Bibliothek
Frankfurt, Federal Republic of Germany

Library cooperation and network systems exist in the Federal Republic of Germany since the beginning of the seventies. These cooperative activities are in some features similar:

- they are based on computerized cataloguing systems developed for a single library. These library systems were modified and enlarged to process data records of several libraries. In particular, participating libraries had to accept the standards of data structure and the processing methods of the established system.
- they are off-line-systems. If a library makes use of cataloguing data already stored, data records are, together with the local data of the demanding library, duplicated. Thus the redundancy of bibliographic data in these systems is very high.
- Library cooperation and joint working arrangements between different libraries took place under regional aspects. Particularly in several states of the Federal Republic libraries of new-founded universities work together in a network system.

The efforts to introduce data processing in libraries increase for several years in all areas. The planning concentrates in the development of on-line-network systems. A report of the Deutsche Forschungsgemeinschaft titled "Recommendations for regional network systems and the establishment of library network organization" encourages these projects. As the title already declares, the recommendatons follow the regional principle. Network systems should be built up at the existing seven bibliographic centres, which maintain today the regional union catalogs with conventional methods. Each network system is organized by a central organization, the Bibliothekszentrum. This organization provides on one side the necessary processing equipment, programs and services, on the other side takes creative tasks and decisions away from the participating libraries. On behalf of political and technical reasons the concept of one nation-wide network system was abandoned. In the designed regional systems responsibilities are shifted from the libraries to the Bibliothekszentrum. It seems, that this process could not be accomplished in a national network system, while the authority in cultural affairs - and libraries belong to this sphere - lies in the regional ministries. Moreover it is believed, that one

system only could not provide sufficient services and meet the requirements.

A national cooperation between regional networks and the following institutions is anticipated:

- the Deutsche Bibliothek in Frankfurt, the national bibliographic centre of the Federal Republic. In the evolving regional networks the role of the Deutsche Bibliothek is related to distribution of cataloguing and authority data.
- the Zeitschriftendatenbank at the Staatsbibliothek Preußischer Kulturbesitz, creating a national serials data base through cooperative efforts of participating libraries.
- the information centres built up in the last years in the documentation area. These centres function as intermediaries of information and supply information dissemination services.

The pro and contra arguments for regional or national networking can not be discussed here. More than half an hour is needed for this problem. Instead of, emphasize is given to application functions, which libraries claim in a network and the requirements of software and data base design resulting from these demands.

The regional networks should take over the following tasks:

- Making available bibliographic data bases for shared cataloguing purposes and transmit machine-readable records from national and international tape services
- Central processing of bibliographic records and local data. Production of catalogue for participating libraries and joint catalogue for the total network
- Book ordering, printing of order slips, control of outstanding orders, book receipt
- interlibrary loan communication and request of books
- Development of standards, control of data consistency, central correction of bibliographic data

Before doing this, the Bibliothekszentren have to design and to develop their on-line-systems. The technical network configuration

is to work out, software packages are to analyse, evaluate and to select for implementation and, after all application programming is to accomplish. At the same time the organizational structure of the network is to establish.

The stage of development differs from one region to another. In few states of the Federal Republic of Germany network organizations are founded, hard- and software decisions are made and enormous capacity is employed in system analysis and programming. But up to this moment none of the networks operates in practice with an on-line-system.

Library requirements

The interpretations of what a network should provide and how it should work differ in my country from region to region, from library to library. A homogenous catalogue of requirements, an agreement of all participants, does not exist. However in essential points such as data structure, access and retrieval possibilities, data manipulation functions there is a consensus of opinions.

Data structure

The elaboration in the Federal Republic of a standardized format for bibliographic data took place very slowly. In 1975 the machine-readable format for bibliographic data was developed and called MAB. Since 1977 the Deutsche Bibliothek is using this format for their tape service and the Zeitschriftendatenbank in Berlin adopted MAB for the exchange of serial records. The MAB-format is largely accepted by the network systems. Structure and contents designators in the MAB-format correspond to the German cataloguing rules (RAK). For local data of participating libraries individual formats are set up. The agreement on the structure of bibliographic data includes the determination how records are related. All systems gave up the philosophy of one single record for the description of a bibliographic entity. The traditional file structure will be substituted by a complex system of record linking.
The following types of relationship are distinguished:

1. Hierarchical relationships

To this category belong

- multi-volume publications. Parts of a multi-volume work are described in separate records. The hierarchical level serves as a link between records. In a complex bibliographic item the level identify the stage of a specific description. Opinions vary how many hierarchical levels should be treated. Some networks consider a two-level-structure sufficient for all cases, e.g. one set record for the bibliographic description of the multi-volume-work, one piece record for the different parts.
  Several libraries require a minimum of tree levels and other groups desire no limitations for related records at all.
- series records
  A special hierarchy is the relation between a series and monographs published in a series. The simpliest form of this relation consists of a series and a single monograph linked together. More complicated are cases in which the entire multi-volume-work or only parts of them are published in one or more than one series.
- analytical entries
  A special type of record is foreseen for the headings of analytical entries. These records must be linked to the bibliographic record containing the full bibliographic description.

2. Authority files

In the regional networks authority files should solve many of the problems of bibliographic control and data consistency. At first the design of authority files for corporate names is taken into consideration. The joint authority file for corporate names of the State libraries in Munich and Berlin and the Deutsche Bibliothek promotes the development of authority controlled systems.

3. Local data

The individual data of participating libraries, e.g. call numbers, locations of departemental libraries, acquisition and subject data, are to be stored in seperate records. The scheme of record links must take into account these local records too.

In general the concepts for library networks assume that data structure and relations of records are valid for all participating libraries. Naturally this assumption prerequisites a high degree of standardization and accuracy. Thus, not the participating libraries should have the right to correct and amend bibliographic data. This responsibility is assigned to the network organization, the Bibliothekszentrum. Other solutions for these problems are not discussed. No provisions are made for private data as it was designed in MERLIN. Private ownership of data on all levels of data storage, private view to linked records or individual authority headings which differ from the central authority file are not developed.

Access points and retrieval

To find relevant items, extensive facilities must be allowed. The following different access methods are required. They reach from simple access keys up to full information retrieval:

- number keys, e.g. ISBN, ISSN
- author/title keys
- whole contents of a field, e.g. headings and references of author and corporate names
- words of any field, e.g. keywords of titles

As a consequence of these requirements, the networks must provide access facilities corresponding to the possibilities of information retrieval systems. An access technique operating exclusively with number and author/title keys, like OCLC-keys, are criticized. Above all the limitations of search keys for the retrieval of periodicals, corporate names, etc. are not accepted. Although libraries in the Federal Republic have little experience with this access methods, this opinion is very common.

Data manipulation and control

All operations concerning data manipulation should be processed in real-time. This includes the following operations:

- new input records and corrected records must be checked, error diagnostics must be generated and displayed
- the authorization for corrections must be controlled

- related records must be linked or stored links modified
- all data files and index files must be updated in real-time

In an on-line-network-system the real-time update of all files is, naturally, an important consideration. However, the problems for system designers arise from the both requirements: full information retrieval and real-time-update simultaneusly. In this point, the demands of librarians are more fixed to what is desirable than to what is really necessary and can be realized.

On-line editing

In addition to data structure and search methods various ideas exist, how the on-line input of bibliographic data should be organized. Obviously, solutions to this problem, which are accepted by a majority are not worked out. For interactive cataloguing some libraries favour a blank screen, unformatted and the cataloguer enters tags and data. Other prefer variable formats. A new record should be generated in prompting mode. But all agree, that formatted protected displays are unconvenient.

Data base requirements

Network systems providing these requested services can only be accomplished with data base management systems. As to data structure, flexibility, redundancy the DBMS-software must comprehend specific qualities. It is a matter of cause, that these systems must be able to process records and fields of variable length.
Beyond that, they have to satisfy the following conditions:

- data independence
  With regard to the logical and the physical data structure the DBMS has to guarantee data independence. The separation of application programs and storage organization must be achieved. The DBMS should allow the description of data records and their relations in sets by e.g. a specific definition language.
- hierarchical links and networks
  The hierarchy of multi-volume works implies a tree organization, the relationship between bibliographic records and authority records require a network structure. But the mere existence of these types is not enough. Links between records must be

controlled and maintained by the DBMS himself. For example by data or identification numbers contained in specific fields.

- access methods
  A word searching capability and information retrieval functions require a software system, that combine the abilities of a data base management system with a management information system. This system must, as well as, allow an access by keys of fixed length, the inversion of field contents, the maintenance of a dictionary and requests in any combination by Boolean operators.

Data base software packages

The regional networks will use the hardware of Siemens or IBM. For these computer facilities three software packages are available: IBAS, BVS and HEBIS. No system intends to implement the IBM-system DOBIS/LIBIS. The three competitive systems vary in architecture and functions to such a degree, that they can not be compared. Even the evaluation of these software products causes difficulties. The question is: which functions in a data base systems are to be part of the DBMS software package and which functions are to accomplish by application programming. Different opinions exist, but in one point they are congruent: to claim as much as possible from the software supplier and to invest as little as necessary in application programming. With these criteria in mind those systems are prefered in which most of the library functions are already performed, but, perhaps, regarding their flexibility and extensibility are limited. One reason to me to check, how far the relevant three systems can bear comparision with the data base requirements enumerated above.

IBAS

IBAS was developed during 1970-1975 for the University Library of Bielefeld by a software firm. The system was funded by the Federal Ministry of Sciences and Technology. Since 1976 the system is in operation, running on a Siemens-computer. In the last years the first version of IBAS was improved and adapted to a new operating system. IBAS is a compact system. In its on-line-part IBAS consists of a data base management system, a TP-monitor and application modules. The application programs are parameterised. For data

storage and terminal display records and data fields are defined by a macro language. To a certain degree, this procedure allows data independency. IBAS provides record relationship for multi-volume-works, series, authorities. Not so transparent is the "expansibility factor" of IBAS. How much effort is needed to implement new links, for example for local data records? This area is up to know not well investigated. Access to records in IBAS is possible in two ways: by access keys and word retrieval in combination. Data and index files are updated in real-time. The reorganization of files is necessary. For the implementation of IBAS in a network system adaptability and performance of the system are to investigate. One important question concerns the interface to the files and the data base in IBAS. Only by a defined interface application routines can be handled efficiently. This must be achieved without the support of a software agency. Today several IBAS-installations are planned. In these institutions the software firm, having developed IBAS, should become responsible for both, implementation and application programming. A loud voice is requested to warn against this dangerous development.

BVS

BVS is the Siemens software package for network systems. Originally the system was developed for an agency controlling author rights and royalties. For several years BVS is changed for a bibliographic on-line application. The development is not yet finished. Siemens has announced revised versions of BVS for this year. The system consists of a data base management system and a TP-monitor. Attached to BVS is the information retrieval system GOLEM.
As in IBAS data records and tags are described in macros. The macro language is also used to define the display formats. Record relationships are provided, but links are not processed automatically. By special commands the terminal operator has to explain to the system which records should be linked. These components of BVS shall be improved. Local data can be stored in special segments of a data record. This method makes clear, that in BVS the on-record-concept is not yet given up. Several kinds of access keys are possible. Keys are generated by application programs. Word searching and information retrieval run through GOLEM. GOLEM itself uses the BVS-data records and maintains merely the index-files. BVS-files

are updated in real-time-mode. The inverted files of GOLEM are only updated in batch. File reorganization is not necessary. The concept of record and file relation needs improvements. But one of the advantages of BVS is the defined interface to application programming. For example it is optional to check the content of a record before it is stored, amended or displayed.

HEBIS

HEBIS is not a data base management system, but the name of the network system for Hessen. The bases of HEBIS are ADABAS and the TP-monitor COMPLETE of IBM. Application programming is done in PL1. The system is under development. Up to now, fifty years of manpower are needed. HEBIS can not be measured with the criteria for DBMS-software. They are only applicable to ADABAS. ADABAS could not solve the whole concept of record relations. Particularly those links relating to relations in one file are accomplished by application programs. HEBIS works only with an access by keys. Access points might be the contents of a data field. Information retrieval facilities are not implemented. System designers are thinking, one of the benefits of HEBIS in the future would be his portability.
But even by the use of a different TP-monitor for example on Siemens-computers causes a lot of adaptation problems. To adopt HEBIS means not only the acceptance of data structures, but of methods and procedures of an automated bibliographic system, too.

Summary

In this view of network planning the federal structure of West-Germany is revealed. Everywhere are made great efforts in investigating, designing, programming. Some people argue, it would be more economic to collect all energies in one national network. Furthermore the network projects demonstrate, that library requirements are not oriented to the software facilities, we have today. They are a little bit utopian. Our experiences with computerized cataloging systems are hardly fifteen years old. Many libraries still have to take the step from a traditional system to automated procedures. When starting on-line-networks, we should learn the capability to accept limitations.

IFLA Council 1981

DIVISION: Management and Technology

SECTION: Information Technology

54/INF/3E

An International Marc Network

by
Hope E. A. CLEMENT
Associate National Librarian
National Library of Canada
Ottawa, Canada

Abstract

An overview is presented of the work of the International MARC Network Study: Steering Committee of the Conference of Directors of National Libraries and of the issues which confront an evolving International MARC Network. The need for a permanent office to support such a Network is discussed as well as a programme for the Office and priority needs for research and development in the international MARC field.

AN INTERNATIONAL MARC NETWORK

I Introduction

This paper will cover the work of the International MARC Network Study: Steering Committee (IMNS:SC) of the Conference of Directors of National Libraries. The Conference is affiliated with IFLA and the directors generally meet during the IFLA annual conference.

As representatives of national libraries most of which are also national bibliographic agencies in the UBC sense, that is they create bibliographic records for their national publishing output, the directors have been concerned with the dissemination of these records. In the computer age, MARC has evolved as the principal vehicle for the dissemination of cataloguing data for the use of other libraries. National bibliographies of course continue to be produced in printed, and, in many cases, microform, but for purposes of cataloguing and of information retrieval, the MARC formats have become the vehicle for rapid data dissemination and the national bibliographic agencies which produce MARC records comprise an informal network for the sharing and use of each other's data and for making MARC records from other countries available within their own country.

Foreseeing a need to address the policy issues of such an evolving MARC network, the Conference of Directors held a meeting, at the Bibliothèque nationale in Paris in October 1975, on the policy aspects of the international exchange of bibliographic data in machine-readable form. This meeting was attended by directors or their representatives from twelve countries which were involved in national MARC developments as well as representatives of the IFLA UBC Office and UNESCO. As a result, a Steering Committee was struck to carry out an international MARC network study. The national libraries from the following countries were represented on the Steering Committee: Belgium, Canada, Denmark, France, Germany (Federal Republic), Great

Britain, the Netherlands, and the United States, as well as the Director of the IFLA UBC Office which has acted as banker, publisher and formal contracting agency for the Steering Committee. The national membership of the Committee has remained stable with the addition of the National Library of Australia. The first chairman appointed by the Conference of Directors was Richard Coward, then at the British Library. When he left the Library in 1979, I was appointed chairman. The work of the Committee has been financed by national libraries who contribute funds and/or staff time and travel expenses. I would like to stress that the present Steering Committee is a committee of the Conference of Directors of National Libraries and, as such, its members are employees of and appointed by their respective national libraries. The issues which the committee has addressed are those referred to it by the Conference of Directors and are thus those of direct and immediate concern to national libraries. In this context, a MARC record is defined as a record produced by a national bibliographic agency. Thus the totality of these records constitutes a potential data base covering the publishing output of the MARC producing countries with minimum overlap, in effect a UBC data base. The addition of MARC or MARC-like records from other sources, e.g., university or public libraries or commercial or quasi-commercial bodies would immediately change the nature of the universe of records to be considered and would create considerable duplication in coverage and more divergence in standards. The Steering Committee is concerned with the primary source records created by national bibliographic agencies and with the widest possible dissemination of these, so that unnecessary duplication of costly record creation can be avoided and so that records of national and international standard can be made available.

The Steering Committee's definition of the MARC network, in terms of its studies to date, is those bibliographic agencies which are exchanging or intending to exchange bibliographic records in machine-readable form using ISO 2709 as the basis.

II The Wells Report

The first work of the Committee was to oversee a general MARC network study which would make recommendations concerning bibliographic record exchange policy and the organizational, financial and operational requirements appropriate to the development of a network. This general study was undertaken by A. J. Wells, formerly Director of the British National Bibliography, and was supported by three special substudies: a communications study by Mlle Martine Galland, Grenoble, France; a bibliographic study; bibliographic practices, prepared by the UBC office; and a bibliographic study; MARC data bases, prepared by Robert Gabriel of the Royal Library, Belgium.

The Wells report covered a survey of the MARC Network situation, and studied and made recommendations on the bibliographic, machine and management aspects of the MARC network.

Mr. Wells identified three essential elements which must exist if an international MARC network is to prove satisfactory:

> "An effective national system in each of the participating countries for the preparation of bibliographic records covering the national output of monographs, series, maps, music as well as audio-visual material.
> A general level of compatability in national bibliographic codes and practices which makes it economic to use the products of foreign agencies in national networks.
>
> Communication facilities which permit the interrogation of bibliographic data bases in international networks."[1]

The Wells Report stated that the MARC network was at that time (1977) at a national stage of development and although many developments have taken place since then, the network still lacks a formal international structure to disseminate information, to maintain and promote international MARC network standards and to carry out research.

The Report highlighted the many successful efforts to standardize the content of bibliographic records, although much remains to be done especially in the area of subject data. It identified areas where there was a need for concrete data, for example on traffic flows and transaction volumes. It also recommended an international MARC Network Advisory Committee with a permanent secretariat located at a national bibliographic agency or at an international office and raised the issue of the possible need for central or regional MARC network groups. The Wells Report was a key document in identifying the issues and problems of a MARC network. It was published in 1977 by the UBC Office.

III International MARC Exchanges

One of the problems identified in the Wells Report was that of the terms and conditions of access to MARC records, particularly with regard to tape exchanges between countries. The Report recommended "a special study...of the conditions under which national MARC agencies supply records to other national agencies[2]". This recommendation was given priority by the Steering Committee and in 1977 the Conference of Directors authorized a study of the copyright issues affecting the supply and dissemination of MARC records to other national centres and to individual institutions.

In 1977, a few bilateral MARC tape exchange agreements had already been negotiated between countries, the first formal agreement being that between the Library of Congress and the National Library of Canada signed in 1974. The issues which arose in connection with these agreements concerned copyright and the restrictions placed on the use, modification or redistribution of records within the receiving country, as well as that of the exclusivity of such agreements. For example, would French MARC records be available in Canada only through the National Library of Canada or would they also be distributed directly by the Bibliothèque nationale to Canadian libraries? Obviously the widest and most unlimited use of MARC records would best promote the concept of UBC and help libraries everywhere to reduce high costs of cataloguing and would, as well, support the Universal Availability of Publications (UAP).

The MARC exchange study was undertaken under contract by Joseph A. Rosenthal of the University of California, Berkley. Questionnaires were sent to 25 countries to obtain data on MARC policies and 19 responses were received. Although the great majority of bibliographic agencies considered that their records were legally protected by copyright, they were in most cases willing to waive copyright considerations under exchange agreements with other national agencies. Therefore the terms and conditions of the agreements became very important. Agencies were not as willing to waive copyright where commercial bodies were concerned, but they generally would do so for non-profit cultural institutions such as libraries. It has proved very difficult to develop a definition of a not-for-profit institution which is valid internationally and it is also very difficult to apply such a definition to quasi-commercial library utilities. Survey returns also showed that national agencies were frequently concerned that their records not be used by other institutions to reproduce the national bibliography of the originating country. In some cases, national agencies would impose restrictions on the re-distribution of records unless they were modified by the foreign national bibliographic agency receiving them. The whole question of exactly what constitutes modification of a MARC record is a very complex one. The difficulty of monitoring exchange agreements also makes it almost impossible to enforce terms and conditions of the use of records once re-distribution beyond the receiving national agency is made, that is, the issue of third party use. Librarians have copied each other's cataloguing records from catalogues and printed bibliographies for years and will continue to do so at every opportunity without worrying unduly about the ownership question. This did not become an issue until libraries realized the potential commercial value of large data bases.

The Rosenthal study examined all these issues, recognized that many problems are virtually insoluble and recommended a model bilateral exchange agreement. This agreement was modified somewhat by the

Steering Committee and was finally approved by the Conference of Directors in 1980. It was published, with a summary report, by the UBC Office in the same year.[3]

A recommended text is given for a bilateral agreement for the international exchange of MARC records in tape format between national bibliographic agencies. To understand the purpose of the agreement, all the words in its title are important. It is meant for tape exchange only, between two national agencies. Thus it is not appropriate for record dissemination in an on-line environment with multiple partners. On-line multi-party record exchange is a different problem which now requires examination. IFLA has contracted "An international study of copyright of bibliographic records in machine-readable form" to King Research, and although it is not specifically addressed to the problem of MARC source records from national bibliographic agencies, it will no doubt make a useful contribution to this current problem. The multi-lateral exchange of MARC records in an on-line environment is one which must be faced by an international MARC network and which national bibliographic agencies should address.

To return to the bilateral tape exchange agreement, it should be pointed out that the recommended text of the agreement has been deliberately kept as simple as possible. The text includes notes for the development and insertion of modifications as required by special conditions relating to agreements between two specific countries. The basic text promotes the most unrestricted record exchange. As such it is, of course, an ideal which supports the full spirit of UBC.

There are still unresolved areas concerning MARC record exchanges. The first is the definition of what constitutes modification. Records can now be converted by machine from one format to another without human intervention and without change of bibliographic data content, except for the deletion of data which the receiving format cannot handle or a reduction in specificity of content designation. However, with the advent of machine-readable authority files, records can now be processed against national authority files. Headings established according to national standards can then be substituted for those of the foreign source record. Such a modification would constitute a substantive change in data as opposed to a mere format change. This modification question needs to be examined in the context of interlinked on-line systems and data bases, especially in relation to evolving standards for open systems interconnection (OSI). The use of OSI in linking national and international networks as well as individual libraries will greatly change the access to and use of records and will affect the role of national bibliographic agencies both nationally and internationally. Records will be searched in multiple data bases and transferred to local systems for processing. Search only requests will be used to locate and initiate interlibrary

loan requests. Users will not be locked into any one system. There is great potential for records to become much more widely available and for local libraries to have greater flexibility in the use of standards for their local needs. Other current issues that will affect the exchange and use of national bibliographic records are transborder data flow and third party use.

The Steering Committee is well aware that the model agreement for exchange of national MARC records between two countries in a tape mode, in UNIMARC or a national MARC format, is rapidly becoming obsolete. However, the Committee stresses the spirit of this agreement which encourages the use of records for a country's publishing output on a world-wide basis with as few restrictions as possible. Although methods of data dissemintion and data use are changing rapidly, national agencies will continue to have the responsibility and to carry the largest part of the expense for the original creation of records for their national publishing output, whether this is done centrally by the agencies themselves or in a decentralized fashion. For example, in Canada, the National Library has a Cataloguing-in-Publication program which is partially decentralized to a number of Canadian libraries which are paid to create CIP records for publishing output in their region. We retain quality control to ensure that national standards are consistently applied. Libraries everywhere will continue to depend on national agencies for provision of national source records. It is important to promote generous terms and conditions under which these records are to be made available regardless of the method of dissemination used.

IV A Structure for an International MARC Network

Although the Steering Committee was able to carry out and contract some research towards an international MARC network, a permanent infrastructure was and is still lacking for the coordination and/or operation of a MARC network, and the need for such an infrastructure became increasingly obvious as research projects were identified. The lack of a central information source and an advisory service on the totality of national MARC records is also felt. International standards, like UNIMARC, have been developed without provision for their maintenance and further development. The International MARC Network requires a permanent office or secretariat to support and promote it.

The need for an International MARC Program was recognized by IFLA in 1979 with the establishment of its Program Management Committee which covers UBC and UAP and their respective Offices and has named an International MARC Program as its third area of interest. At the same time, the Deutsche Bibliothek in Frankfurt expressed interest in suporting a MARC Office and possibly a MARC Technical Centre. The IMNS:SC was instructed by the Conference of Directors to study a mechanism for the coordination and operation of an International MARC Network. Developments and proposals by IFLA and the Deutsche

Bibliothek led to the identification of two distinct missions. The first was that of an International MARC Office which could possibly operate under the auspices of IFLA like the UBC and UBC offices and which would have a coordinating and advisory role. The second was an International MARC Technical Centre which would be an operational MARC service centre or utility. These two distinct functions were analyzed by the IMMS:SC and in August 1980, recommendations were submitted to the Conference of Directors of National Libraries proposing the establishment of an International MARC Office as soon as possible and recommending that no further steps towards an operational International MARC Technical Centre be made until a very detailed feasibility study could be undertaken demonstrating the economic feasilibility of such a centre, that is, a marketing study that would demonstrate what services users needed and would be prepared to pay for. These recommendations were accepted by the Conference of Directors and various démarches have since taken place towards the funding and establishment of an International MARC Office. The economic climate at present is unfortunately not conducive to the establishment of another office, however, the need for such an office is still pressing and it is hoped that a means to establish one will be found.

V International MARC Office (IMO)

A brief description of the concept of an international MARC Office as developed by the Steering Committee follows. It should be stressed that this is a preliminary proposal and adaptations would have to be made depending on the mode of implementation and means of support which could be found for such an office. The description of the role, objectives, functions and governance of an Office which follow, assume, for example, the close interest and sponsorship of the Conference of Directors of National Libraries and its direction by the IFLA Program Management Committee.

The role of an International MARC Office would be to promote the development of the International MARC Network for the sharing of machine-readable bibliographic records (both descriptive and authority) as a major component of the Universal Bibliographic Control programme and as a major means of promoting the Universal Availability of Publications.

The objectives proposed for the International MARC Office can be summarized as follows. First, ensuring the coordination, liaison, and exchange of information among the national bibliographic agencies which produce MARC records and with other related international information agencies.

Second, the promotion of the development of standards and of their consistent use and the maintenance of established standards, e.g. the UNIMARC format.

Third, an advisory role to national bibliographic agencies on the establishment of MARC programmes as a contribution to the continuing development of the International MARC Network, as well as representing the interests of national bibliographic agencies where appropriate, in such areas as the conditions of international exchange of MARC records.

Fourth, assisting IFLA professional groups and working with IFLA Sections and Offices in projects relevant to the International MARC Network.

The major functions of the International MARC Office could include: maintenance, development and distribution of MARC-related standard manuals and guidelines (e.g. the UNIMARC format); research and development, including servicing relevant projects, IFLA Working Groups and other expert groups; the compilation and dissemination of network information and statistics (e.g. by publishing a Guide to Marc data bases); and provision of MARC training, and liaison with international non-governmental organizations, governmental organizations and national bibliographic agencies. The Office could recommend to national bibliographic agencies, policies and procedures in the area of exchange of MARC records.

Such an International MARC Office could be established under the auspices of IFLA and be responsible for the IFLA International MARC Programme under the direction of the IFLA Programme Management Committee. It would work closely with the IFLA UBC Office, the Conference of Directors of National Libraries and the IFLA Section on Information Technology. The International MARC Office would be assisted by an International MARC Advisory Committee (IMAC).

Further details on governance, funding, an initial budget and a short range work plan were provided to the Conference of Directors in 1980; these would now require some minor updating before an Office could be initiated.

There is a continuing and pressing need for such an Office. A matter of particular urgency is the maintenance and development of the UNIMARC format. As a preliminary contribution towards this, the IMNS:SC are testing the UNIMARC format under the direction of the Deutsche Bibliothek. The Deutsche Bibliothek selected a representative number of titles of commonly held monographs and serials which present a variety of cataloguing problems and submitted copies of the title pages and tables of contents to the eight national libraries represented on the Steering Committee. The cataloguing departments of these national libraries then searched for entries in their catalogues or newly catalogued each item according to their national catalogue standards and coded it in the UNIMARC format. The Deutsche Bibliothek

is now analyzing the results which should indicate possible problem areas in the implementation of UNIMARC, for example, ease and consistency of use and possible loss of data or specificity of data content designation.

This first manual test may need to be followed by an actual machine test. Changes to the format may be required as a result of these tests. A format needs constant attention if it is to be kept up-to-date with other standards developments. UNIMARC will also require a complementary format for authority file data. Few national bibliographic agencies will be willing to use UNIMARC unless they can be assured that a continuing funded mechanism for its maintenance exists. In order to use UNIMARC each national bibliographic agency will have to write two conversion programs, one from UNIMARC to its national format and one from its national format to UNIMARC. This will save writing and maintaining conversion programs for each foreign MARC tape used by an national agency. However, a number of national agencies have already written conversion programs and a number of other arrangements are being made to get around the need to write conversion programs. For example, Canada has programs to convert Library of Congress, British and French MARC to CAN/MARC. The Library of Congress has programs to process CAN/MARC tapes. Instead of writing conversion programmes for UK and French MARC, the Library of Congress has obtained the agreement of the British Library and the Bibliothèque nationale that they can receive these tapes via the National Library of Canada in CAN/MARC fonnat. These rather complex arrangements would be unnecessary if UNIMARC were implemented by MARC-producing agencies. Thus if UNIMARC is to be used, it must be implemented soon. The coordination of the timing of implementation is also important. It is useless for a national agency to write UNIMARC conversion programmes if no other agency is in a position to send it UNIMARC tapes. UNIMARC is only one example, albeit a pressing one, of the need for an international MARC Network Office and for research and development funds.

The research carried out by the Steering Committee is only possible by the contribution of national libraries which make funds or the time of their frequently hard-pressed staff available. The Steering Committee has identified, prioritized and presented to the Conference of Directors other areas in which research is needed. In looking at research projects, the Committee has always been careful not to encroach on the mandates of either the UBC or UAP Offices, but to refer to them research projects relevant to their mandates. For example, CIP is of considerable importance to the timeliness of MARC records and the Steering Comittee supported the concept of a meeting of agencies having CIP programs. This is now being carried out by the UBC Offfice and the meeting is to be held at the time of IFLA next year in Montréal.

Areas relating to an internaitonal MARC Network identified as requiring further research include: authority files (an IFLA working group is studying these); standard command language and computer-to-computer links; MARC network and document delivery (the purview of the UAP Office); subject data in MARC records (the mandate of the UBC Office); universal software techniques and automatic record matching. As the latter is most closely concerned with the exchange and use of MARC records, the Steering Committee feels that a state of the art survey of automatic record matching techniques could usefully determine what areas require further research. Issues relating to the use of national MARC records in an on-line interconnected network environment continue to remain of major interest and will require further examination regarding policies for record distribution.

The Steering Committtee has not been active during 1980/81, except for the UNIMARC test, as it has been limited through lack of project funds and has been awaiting developments towards a possible International MARC Office. An International MARC Network, however, does remain a major interest of national libraries, which are the bibliographic record data creators, and of course, of all libraries which use MARC records. It does require a permanent international mechanism for sharing of information, coordination, the development and maintenance of standards and MARC research and development if MARC records are to be most effectively exchanged on a world-wide basis to support UBC and UAP.

References

1. Wells, A.J. The International MARC Network; a study for an international bibliographic data network. London, IFLA International Office for UBC, 1977, p.1.

2. Ibid, p.17

3. International MARC Network Study Steering Committee. International access to MARC records; a summary report with recommended text for a bilateral agreement for the international exchange of MARC records. London, IFLA, International Office for UBC, 1980.

National Library of Canada | Bibliothèque nationale du Canada

Office of the National Librarian | Cabinet du Directeur général

To: Members of the International MARC Network Study: Steering Committee

From: Miss Hope E.A. Clement, Chairman

Date: June 5, 1981

1. I have not called a meeting, as there was no need to meet until the report on the UNIMARC Test being analysed by the Deutsche Bibliothek was completed. Kurt Nowak tells me that the full detailed report will be ready by July. As this is the holiday season, I think we had better take the time to study it thoroughly before meeting to discuss it. Thus I believe that a meeting during IFLA would be premature. We could meet in the fall, October perhaps.

2. I suggest that we should try to get together informally during IFLA. I will be presenting a paper on an International MARC Network at the session of Information Technology I on Tuesday, August 18 at 16:00 to 17:30 hours. I will be speaking mostly about the work of our Committee. Perhaps those of us who are attending IFLA could get together for a drink after the session and plan a fall meeting. Kurt can tell us the latest on the International MARC Office.

3. I have prepared a short progress report (enclosed) to the Conference of Directors on the work of our Committee during the last year. Although we did not meet, we did publish the exchange agreement and undertake the UNIMARC test. Would you please send me any comments which you have immediately so that I can forward it to the Conference chairman, Sir Harry Hookway.

4. As you may remember, I have been representing our committee on the UNESCO Ad Hoc Group on Establishing a Common Communications Format (CCF). A number of proposals are being made which would affect UNIMARC and Henriette Avram and I would like to discuss these with you at our meeting.

5. UNIMARC implementation. In order to get some idea of the potential use of UNIMARC could you let me know the following:

   a) Does your library intend to use UNIMARC?

... 2

395 Wellington
Ottawa K1A 0N4

5. UNIMARC implementation (cont'd)

b) When?

c) Do you consider that a permanent maintenance mechanism must be in place before using UNIMARC?

Would you please send me answers to points 3 and 5 by telephone (area code 613 - 992-7059) or telex (NATLIB 053-4311) by June 30th.

I hope to see you in Leipzig.

Hope E.A. Clement

Hope E.A. Clement,
Chairman.

Encl.

DRAFT

Report of the International MARC Network Study Steering Committee

to the Conference of Directors of National Libraries

June 1981

Hope E. A. Clement
Associate National Librarian
National Library of Canada
Chairman

NOTE: Exact balance of funds at the UBC Office is to be filled in by Dorothy Anderson. (It is £300 to £400.) An Appendix from the Deutsche Bibliothek giving a progress report on the UNIMARC Test is to be attached.

Executive Summary

The Committee has not met during the past year as its one on-going project, the UNIMARC Test, is not yet complete and there were not sufficient funds for additional research.

The Recommended Text for a Bilateral Agreement for the International Exchange of MARC Records, as approved by the Conference of Directors in Manila, was published in December, 1980 by the IFLA UBC Office. After this publication, £ ___ remains to the credit of the Committee at the UBC Office.

The UNIMARC Test data produced by the cataloguing departments of the national libraries on the Steering Committee has been sent to the Deutsche Bibliothek which is analyzing the data and will produce a full technical report by July 1981. The Comittee plans to meet in the autumn to consider this report. Meanwhile, it emphasizes the urgency of further machine testing of UNIMARC as well as the setting up of a permanent mechanism to maintain the UNIMARC format, an essential step before the format will be generally implemented. The Chairman has continued to represent the Committee on the UNESCO Ad Hoc Group on a Common Communications Format and will be referring a paper which has implications for UNIMARC to the Committee for discussion.

The Committee brings the following to the Conference of Directors for their immediate attention:

1. If funds are available for the establishment of, at least, a provosional international MARC Office in 1982, the Committee is prepared to make and recommend minor adjustments to the still valid proposal for the Office, which was approved by the Conference last year. UNIMARC can be given immediate attention.

2. If an Office cannot be established in 1982, the Committee suggests that the Conference provide funds for further testing of UNIMARC. It may also wish to consider funds for the State of the Art Record Matching Study proposed last year. The Conference should look at alternatives to ensure the maintenance of UNIMARC. This could be done by the provision of funds and the hiring of an expert to be located at an existing international office or a national library.

Introduction

The Committee has not met during the year as it has not had the funds to undertake further MARC network research. Its one outstanding research project, the UNIMARC Test, is now being finalized and the detailed technical report will be ready for distribution to the Committee members in July. The Committee will meet to study it in the autumn of 1981. The membership of the Committee remains unchanged. A list is attached as Appendix 1.

Bilateral Exchange Agreement

The Bilateral Agreeement for the International Exchange of MARC Records, which was approved by the Conference of Directors in Manila, was published in December 1980 in 500 copies by the IFLA UBC Office which continues to act as publisher and banker for the Committee. A copy of the title page is attached as Appendix 2. The publication was distributed to Committee Members and to the Secretary of the Conference of Directors of National Libraries for distribution to the Directors. The remaining copies are being sold by the UBC Office where they are available at £2.00 or $5.00 U.S. (ISBN 0-903043-31-9). The Recommended Text for exchange agreements is preceded by a Summary of the Rosenthal Report and an explanation of the use of the Text. The work on the Bilateral Agreement is now serving as an important basis for the International Study on the Copyright of Bibliographic Records in Machine Readable Form which is now being undertaken for IFLA by King Research, Inc., (Washington, D.C.). "The major concern of this study is to explain the issues involved with copyright legislation as a method of control for bibliographic records in machine-readable formats". This study will be of considerable interest to the Conference of Directors. The Recommended Text for an exchange agreement applied only to bilateral tape exchanges. Record distribution is now taking place in an on-line mode and the Conference of Directors will want to explore multilateral agreements for on-line record exchange involving national bibliographic agencies. In order to avoid duplication of effort, it would seem advisable for the Directors to await the results of the King Study before sponsoring further research. However, a policy for multilateral on-line exchanges is becoming a matter of some urgency.

Steering Commitee Funds

The work of the Steering Committee has been supported by national libraries in two ways: first, contribution of money to contract research (these funds have been deposited at the UBC Office which has acted as a contracting agency for the Committee which, of course, has no legal authority to enter into contracts) and second, by the provision of staff time and travel and other support money. The balance of funds credited to the Steering Committee at the UBC Office at the time of my last report was £766.12. The only funds expended during the year were £ ___ to publish the Exchange Agreement leaving a present balance of £ ___. This amount is not sufficient to undertake further research under contract.

UNIMARC Test

As proposed last year, the Steering Committee is manually testing the UNIMARC format. This was done by the assistance of the cataloguing departments of the eight national libraries represented on the Steering Committee and with the overall coordination of the Deutsche Bibliothek which undertook to analyze the results of the test and prepare a report. Title pages of some sixty items, both serials and monographs, commonly held by National Libraries were selected by the Deutsche Bibliothek and distributed to the participating libraries which provided catalogue records for each item according to their national standards and then coded the records to the UNIMARC format. The coded records and an analysis of the problems encountered in attempting to use UNIMARC were then sent to the Deutsche Bibliothek where a detailed analysis of the results is taking place. The detailed technical report is now being written and will be distributed to Committee members during July. Members will wish to study it closely together with their technical experts and I intend to call a meeting of the Steering Comittee in the autumn to discuss the report. It is hoped that the test will identify areas of UNIMARC that require modification or clarification and also the areas which should be explained in a UNIMARC guide or manual. This preliminary manual test should be followed by further testing and revision as required including the preparation of a users' manual. The Chairman wishes to thank the eight National Libraries and particularly the Deutsche Bibliothek for their substantial contribution of staff time to carry out the test.

The problem of the maintenance of UNIMARC is becoming a very critical one. No format for machine-readable bibliograhic records is ever static. It must be changed constantly to keep up with new devlopments and even minor changes in international standards. For example, UNIMARC will doubtless require some changes following the test. It will require changes following the ISBD Review which is scheduled to be complete in 1983. It will need development for new types of materials, for example authority files.

In addition to maintenance, a format requires a users' manual to guide its consistent implementation. A potential user needs advice on implementation and there needs to be an expert who can advise countries on whether UNIMARC should be used as a basis for their national format. This is particularly important for developing countries which are initiating MARC formats. As chairman of the Steering Committee, I receive inquiries about this, as does the UBC Office which is neither funded nor has the experience or expertise in UNIMARC to provide technical advice on it.

UNIMARC has already been used as a basis for the national format of Hungary and in one or two other countries. It has yet to be used as an interchange format between countries already having a national

format. This was the original purpose of UNIMARC. However, a national library must make a financial outlay in order to use UNIMARC. It must write two conversion programs: UNIMARC to national format and national format to UNIMARC. These conversion programs then must be kept up-to-date according to changes in both the national format and UNIMARC. However, two conversion programs are much more efficient than individual conversion programs for each national MARC tape used by a country. National libraries are beginning to enter into some rather complex arrangements to get around the lack of UNIMARC. To take the example of Canada and the United States, the National Library of Canada has its national format CAN/MARC. It has conversion programs to convert British, American and French tapes to CAN/MARC. The Library of Congress has a conversion program to convert CAN/MARC to L.C.MARC. It has now made arrangements with the British Library, the Bibliothèque nationale and the National Library of Canada to receive British and French tapes via Canada in CAN/MARC format. All this would be unnecessary if UNIMARC were implemented. As well, developing countries encouraged to use UNIMARC would be producing immediately accessible records and would have immediate access to existing records of other countries.

The problem remains the need for a permanent mechanism to maintain and develop and advise on UNIMARC. National libraries will not generally use UNIMARC as an exchange format until it is fully tested and updated. A vehicle for multilateral interchange must be centrally maintained.

Thus the most pressing problem of an international MARC Network today is to establish such a mechanism. If funding for the establishment of an international MARC Office, even if provisional, can be found for 1982, this problem will be solved. If the Office is not realisable in the near future, the Directors should consider providing funds to an existing international office or national library to ensure that UNIMARC can be implemented.

Once the mechanism exists, national libraries may wish to coordinate their implementation of UNIMARC. Implementation to be effective must be made simultaneously by a number of libraries which already use one another's records.

Common Communications Format

The Chairman of the IMNS:SC represents the Committee and the Conference of Directors on the UNESCO Ad Hoc Group on a Common Communications Format (CCF). The group is presently considering proposals for a CCF which would affect UNIMARC and these will be discussed with the Steering Committee members during its next meeting.

Other Research Projects

In its 1980 Report, the Committee listed, at the request of the Conference of Directors, a number of research and development projects in priority order. In many cases, the Committee noted that action was either being taken or that the area fell into the mandates of the IFLA UBC or UAP Office. A brief update on several of the project areas follows.

Authority Files The IFLA Working Group on an International Authority System has been delayed in its progress owing to the heavy workloads of the working group members. Therefore the Committee will not require additional financial support in the next twelve months.

Cataloguing-in-Publication (CIP). The IFLA UBC Office is sponsoring a number of CIP studies leading to a specialist meeting on CIP to be held at the time of the IFLA Conference in Montreal in 1982. Planning for the meeting is well advanced.

Automated Record Matching A state of the art survey of this area is still considered to be useful. It could be done under contract and would likely require in the neighbourhood of $5,000 to $6,000 U.S. No action was taken as the Steering Committeee did not have sufficient funds.

Conclusion

Although the Steering Committee has not met during the year and therefore is not proposing formal recommendations to the Conference of Directors, it wishes to bring the following to their attention for immediate consideration. As the availability of funds for an International MARC Office is not known at the time of writing, two situations are possible:

1) If funds are available for implementation of a provisional international MARC Office in 1982, the proposal for such an Office, as given in the Steering Committee's report of 1980 and approved by the Conference, is still valid. The work plan may need minor adjustments and the Steering Committee is prepared to make these and advise on the implementation of the Office. Priority could be given to UNIMARC implementation. The relationship of the Centre and the Steering Committee to the IFLA Program Management Committee would require clear definition.

2) If funds for an Office are not forthcoming for 1982, it is suggested that the Conference of Directors should consider the following:

1) provision of funds to at least carry out further testing and revision of UNIMARC and the preparation of a users' manual ($10,000 U.S.);

2) possible funding of the state of the art study on machine-record matching ($5,000 U.S.);

3) examination of alternative methods of maintaining UNIMARC so that it can be implemented. Such means might be an expert and supporting funds located at an existing international office or national library.

1981/82 Program

It is the Committee's intention to meet in the autumn of 1981 to study the technical report on the UNIMARC Test and to identify and recommend further action which must be taken in order to maintain and implement the format. In addition, the Committee will consider the implications of the proposed Common Communications Format and carry out any instructions resulting from the meeting of the Conference of Directors in Leipzig.

IFLA Council 1981

DIVISION:

SECTION: Plenary Meeting

1981/PLE/9E
115

The System of Management of Librarianship in the USSR

V. V. SEROV
Head, Library Directorate
USSR Ministry of Culture
Doctor ped. sc.
Moscow, USSR

1.(12)

V.V.Serov
Head, Library Directorate,
USSR Ministry of Culture

THE SYSTEM OF MANAGEMENT OF LIBRARIANSHIP IN THE USSR

In the USSR State management of all branches of economics is exercised from the very first years of establishment of the country. In conditions of a new social order centralized State management represents an objective economic law and an important advantage of socialism.

The effectiveness of the system of centralized planned management of economics is convincingly borne out by the outstanding achievements of the Soviet state. Economics of the Soviet Union have for some decades now been developing in the line of ascent. The USSR takes the lead in the production of steel, petroleum, coal and coke, iron ore, pig iron, mineral fertilizers, diesel and electric locomotives, cement, woolen cloth and some other products.

The enhanced scale of production and economic relations, which have taken on a more complex character, called for the improvement of the organisational structure of management of all branches of national economy, the introduction of complex methods in the solution of major State, interdisciplinary and territorial problems, development and implementation of uniform programmes the removal of interdepartmental and local barriers, the develop-

ment of democratic principles and local initiative. In these conditions organization, i.e. the further improvement of management of economics in the broad meaning of the word, becomes the decisive factor.

All these general principles and demands made of the consolidation of management of the economic and social development of the country are directly connected with librarianship.

Already in the first years of Soviet rule, departments for the management of public and reseach libraries were established within the People's Commissariat of Education. These departments, together with the Central Library Committee, headed by N.K.Krupskaya, directed their efforts toward the creation of the Soviet library system, the implementation of V.I.Lenin's decree on the centralization of librarianship (1920) and the consolidation of State management of libraries of all types.

After the approval in 1934 of the important legislative document "On Librarianship in the USSR" library departments were organized within the People's Commissariats of Education in the Union republics. These departments were responsible for the State control of all library activities, management of acquisition, selection, selection and training of personnel and the construction of library buildings.

Today management of libraries is exercised by the Library Directorateof the USSR Ministry of Culture, the departments of the USSR State Committee for Science and Technology, the USSR Academy of Sciences, Ministry of Higher Education and other ministries and departments.

Similar departments have been also set up in the Union republics.

Special sectors or groups, made up of a number of specialists and administration officers who plan the development of libraries located on their territory, operate in regions, districts and cities of the country. They are responsible for the construction of libraries, their modern technical equipment, the selection and distribution of library personnel and the improvement of their professional skill. They also give support to the improvement of their living and housing conditions.

At all stages of development of Soviet society the problems and content of the activities of all Soviet libraries, the pace and plans of development of their networks, the provision of libraries with the necessary material and technical means were determined by State and party documents, beginning with V.I.Lenin's decrees devoted to questions of culture and specific problems of librarianship and bibliography.

In this way we can state that in the main a state system of organizational management of librarianship has been created in the USSR.

The Soviet state practically sets up all the libraries of the country, finances the construction of buildings and the acquisition of libraries. The State also provides them with the necessary technical equipment and trains and re-trains employees for libraries of different types. Library management agencies, created on all levels, State-wide and interdepartmental bodies

plan the development of libraries, control their activities, develop and approve State-wide normative documents concerning the principles of distribution of library networks, depository libraries, the uniform interlibrary loan system, technical equipment of libraries of different types, etc.

As a result of State management a uniform system of library service of the population has crystallised in the USSR. It is characterised not only by the existance of an enormous number of libraries, but the diversity and interdependence of relations between them too. Indeed, 350 thous. public, research, technical, university, medical, school and other libraries, belonging to many departments, serve the population of the country. Their total holdings run to approximately 5 milliard volumes; the number of users has reached 220 million and the annual circulation of books and other information materials is over 5 milliard copies.

The second characteristic feature of the library system is its dynamism. In the last 15 years more than 40 thous. libraries of various types have been created, the number of full-time employees has increased by 120 thousand people. In the period from 1973 to 1980 the number of users of public libraries alone has increased by approximately 30 million and the circulation of books by 800 million copies.

The most important problems in terms of the improvement of the uniform library system are the expansion of functions of Soviet libraries and the raising of their social role in the solution of training, production and economic problems; introduc-

tion of novel changes into the organization of librarianship on principles of centralization, which guarantee profound qualitative reformation of all library activities and, simultaneously, influence the general aspect of the modern library. As a result of centralisation library institutions of a new type, i.e. centralized library systems of districts and cities, are being created.

In the course of all the years, since the establishment of the Soviet state, the smoothing down of different levels of library service in various regions of the country on the basis of planned distribution and regulation of the network and the development of new principles of its distribution in accordance with demographic changes, which are taking place in the country, were tasks to which much attetion was and is being paid.

The course of priority development of library resources in republics, which were formerly backward in this respect, is successively being followed. As a result only during one decade (1965-1975) the average increase in the network of public libraries in the country as a whole made up about 8%, while in the Kirghiz SSR (in the same period) it increased by 32%, in the Uzbek SSR by 33% and in the Tadjik by 48%. This led to the practical levelling of the number of users per one library in all regions.

In 1977 new normatives of organization of libraries were approved. For the first time differentiated principles of organization of city libraries intented for 3-5 thous. inhabitants in settlements with four or five-story housing systems and for 20

thous. people and more in cities with multi-story housing systems were defined. Principles of organizing village libraries for 500 -700 and 2 thousand inhabitants were also worked out. On the basis of this document much was done in the way of regulating the network and by 1980, in the main, the disproportions in library distribution were eliminated.

Soviet libraries have a firm financial base that is becoming stronger every year. 90% of the libraries receive State support. Plans envisage the construction of library buildings and the production of the necessary equipment.

The construction of new buildings gained in scope most impressively in the last 10-15 years. Annually approximately two thousand public, large academic, universal, research and technological libraries are put into operation. Lists of the technical equipment of public and some special libraries, for which large grants have been allotted by the State, have been approved.

The increase in the pace and dimensions of the construction of library buildings, the functioning of thousands of libraries and multi-milliard book collections and other new developments called for the further improvement of the entire mechanism of management and planning with the aim of using the existing and developing library resources to the fullest degree and most effectively.

The task of consolidating the centralized management of library development with the aim of following the State-wide policy became particularly important and urgent. It was necessary to solve the problem of correlation of territorial and departmen-

tal management, block the way for local and departmental tendencies, remove parallelism and duplication in the distribution of libraries and in the building up of their holdings. It was also necessary to organize bibliographical and methodological work.

The Decree of the Central Committee of the CPSU (May 8,1974) "On the raising of the role of libraries in the communist education of the working-people and scientific and technical progress" was most important and greatly helped to overcome the departmental approach to library development, to ensure close cooperation between libraries of different types, to coordinate the management of librarianship with the object of following the State-wide policy. After discussing the departmental dissociation of libraries and the isolated character of the activities of many technical and special libraries, the Central Committee of the CPSU outlined an expansive programme of measures for the improvement of State-wide management of librarianship and the advancement of library service of the population. The Decree develops V.I.Lenin's principles of public use of books in conditions of a developed socialist society. It envisaged cardinal changes in the organization of librarianship in the country on principles of centralization.

The Decree also defined measures for the improvement of State-wide management of libraries of all types including the following:

- establishment of a special body for the coordination of library management exercised by all ministries and social organizations;

- improvement of departmental management of appropriate library networks in all directions;

- raising of the level methodological guidance and its coordination;

- scientific substantiation of management of library construction;

- speciafication of the main lines of development of librarianship in the country and the improvement of short-term and long-term planning.

An important phase in the consolidation of centralized management of libraries directed toward the support of their interaction and coordination of their work was the organization in 1975 of the State Interdepartmental Library Committee attached to the USSR Ministry of Culture. The Soviet government granted the Committee quite wide powers in the following of the State policy in the field of librarianship and coordination of libraries of all types.

It is pointed out in the decree concerning this Committee that ministries departments and social organizations should exercise the management of libraries within their jurisdiction with due regard for the decisions, suggestions and recommendations of the Committee.

The State Interdepartmental Library Committee has been made responsible by the USSR Council of Ministers for the following:

- discussion of plans of prospective development of librarianship in the country; development of suggestions supporting the interaction and coordinated work of libraries belonging to ministries, departments and social organizations;

- taking decisions on drafts of legislative documents dealing with the activity of libraries;

- working out of recommendations on the improvement of the cooperation of libraries with publishing-houses, book-trade organizations, STI bodies, radio and TV;

- support of: the organization of a uniform system of inter-library loan in the country and the system of depository storage of collections; the removal of duplication in library acquisition; the coordination of work of information bodies and libraries on the basis of uniform collections of reference and information works; the mechanization of library and bibliographic procedures;

- development of suggestions on the building-up and use of library collections, including such aspects as acquisition of current literature, specification of its circulation, reprinting of literature with due regard for the demands of the population and libraries;

- working out of suggestions of the improvement of personnel training and of methodological work and research in the field of library science and bibliography;

- expansion and consolidation in the established order of relations with international and national library associations of foreign countries.

In this connection the Committee has the right to take decisions directed toward the improvement of coordination of library management, receive the necessary materials from the libraries of appropriate ministries and, with their agreement, examine the

state of work of the libraries under their jurisdiction. The Committee also has the right to hear at its sessions the accounts of representatives of ministries, departments and social organizations dealing with the work of their libraries and on the course of implementation of the recommendations of the State Interdepartmental Library Committee.

Members of the Committee include senior personnel of ministries, departments and social organizations, which have the largest library networks, representatives of the USSR State Committee for Publishing, Union of Writers of the USSR, Central Committee of the Leninist Young Communist League of the Soviet Union, All-Union Society "Knowledge", Society of Bibliophiles. The Minister of Culture is the chairman of the Committee.

The Committee is supported by the Library Council, which is a social consultative body of library workers of the Soviet Union.

The Library Council discusses current problems of librarianship, examines the activities of library councils attached to the Ministries of Culture of Union republics and hears their accounts, prepares suggestions for the consideration of the USSR Ministry of Culture, the State Interdepartmental Library Committee and other ministries and departments, which have library networks.

In order to draw large circles of librarians into the discussion of problems of librarianship committees for methodological work, bibliographic activities, library service of children and juveniles, research, construction and equipment of libraries, foreign relations, etc. have been organized within the Library Council.

In keeping with the established order the Library Council conducts work connected with the development and consolidation of international cooperation in the field of librarianship through establishing relations with libraries of foreign countries and international organizations.

Similar interdepartmental library committees and library councils have been organized in all Union and autonomous republics, and regions of the USSR. Social library agencies have been created along the line of research, technological, university, academic and other kinds of libraries.

After the publication of the Decree of the Central Committee of the CPSU (1974) a large number of State normative documents were prepared and approved, all of which played a very important role in the improvement of library activities and their coordination. Among these documents the following deserve special mention: new rules in the interlibrary loan system; regulations concerning the State-wide system of depository storage, cooperation between research and universal libraries, special regional and universal depositories; acquisition policy of research and technical libraries; the library series of books and the centralized processing of books in library collectors. Here only some interdepartmental documents are listed, but even they give one an idea of their scope, novelty and importance in the improvement of practic activities and the development of the theory of librarianship.

The common specific features of the afore-mentioned documents are: their aim is to raise the quality and effectiveness of ideo-

logical and educational work with the readers and the expansion of the social functions of libraries, and the solution of problems, connected not so much with the advancement of the existing system as with its reformation according to new principles; they are scientifically substantiated since the majority of them (decrees on centralization, depositories, distribution of the network) have been developed after many years of research and they are of interdepartmental and compulsory character. The fact that these documents are equally binding for all should be stressed for some of them have been aprroved by the government and the bulk of them represent the joint decisions of the USSR Ministry of Culture and other ministries.

Improvement of library planning has currently become an objective necessity. The raising of the level of planning activities is the central element of management of the development of society. Plans cover not only scicitific, technical and economic questions, but social and ideological problems, connected with the molding of people living in a new society. In the field of culture, including the development and management of libraries, planning also ocupies an important place.

The first library plans were worked out for 1928-1932, 1933-1937 and 1938-1942, but as their methodological basis was weak they had many inadequacies. In 1951-1954 and the early 60s uniform interdepartmental plans in cities and districts were compiled on a wide scale. These plans played a significant positive role, but they failed to solve problems of State-wide planning.

New dimensions and problems of library development called for the identification of the main trends and prospects of development of librarianship and for the mapping out of five-year plans in the field. In 1966-1970 a prospective programme of library development in the RSFSR was prepared; it defined not only the main indicators, but for the first time contained new ideas such as the expansion of functions of public libraries, the final regulation of the library network and the begining of its centralization, organization of depositories, etc. These methodological points and the methods of drawing up plans were specified and concretized in plans of library development in the country for the ninth and tenth five-year-plan periods.

All these plans had the following characteristics in common: library planning was accomplished with due regard for the social and economic development of the country; indicators and trends of future development were calculated on the basis of the analysis of their development in the past; drafts of library plans of the republics and regions and of some departments were taken into account; a number of indicators (library network, personnel training, financing of acquisition and construction) were coordinated with State management bodies; special additional plans of methodological, bibliographical and scientific work for these years were drawn up.

In the USSR library planning is continually being improved in accordance with the growing demands made of libraries and expanding dimensions of library development. Currently a long-term plan of library development up to 1990 has been drawn up in the

country. It was prepared with due regard for the growing role of libraries in the intellectual life of society, the social and economic development of our country, scientific and technological data, demographic forecasts and other factors.

Questions of rational distribution of library/bibliographical resources, provision of libraries with automatic and mechanical equipment, concentration of scientific man-power and material means on the main directions of development of the library system occupy a prominent place in the plan too. An impressive raising of the quality of book and information service of dwellers in the rural districts, in Siberia and the Far East, the North and other new developing territorial and industrial complexes is also envisaged.

The main component of the State system of library management is the activity of All-Union republican and regional universal and special libraries in the filed of methodological guidance of local libraries.

The system of methodological guidance of libraries, which was also organized in the first years of establishment of the Soviet state, is based on the territorial-disciplinary principle and covers universal and special libraries - methodological centres of different levels from All-Union to central city and district libraries of centralized systems of public libraries. The interaction of particular components of the system is ensured by unified coordination plans of research and methodological work.

As a rule, methodological centres quickly respond to the problems that life imposes upon us, profoundly analyse the state of activities of libraries, critically assess the situation and actively introduce the developments of library theory into practice.

The raising of the effectiveness of library management promotes the wide development of research in the field of library and bibliographic sciences and bibliology.

Over 300 institutions (research departments, universal and special libraries on the All-Union and regional level, faculties of special higher educational institutions) conduct independent studies or take part in joint scientific projects. A Committee for the coordination of research and some specialized councils dealing with the main problems of librarianship have been created. The scope of subjects of research has expanded and taken on a more realistic quality, a factor which gives research a more practical bent.

Such scientific studies as "Centralization of the system of State public libraries", "Books and reading in the life of towns", "The library and information", "Functions of research and scientific and technical libraries in the uniform system of scientific and technical information in the uniform system of scientific and technical information in the country" and a number of projects devoted to reading interests, book collections and the system of depository storage are widely known.

The work of the specialized councils in the field of bibliothecal/bibliographical classification and the uniform library

system had great theoretic and pragmatic importance. As a result of the work of the former council a new Soviet scheme of bibliothecal/bibliographical classification was mapped out and multi--volume and one-volume classification schemes for very large and large public and children's libraries were prepared. They are now being widely introduced in our country.

The series of works dealing with the bibliothecal/bibliographical classification has been presented in the competition for the State Prize of the USSR for 1981.

The State Lenin Library of the USSR has been entrusted, among other things, with such duties as the coordination of scientific activities, development of the main trends of research and the drawing up of summary plans of research, control of their implementation. It also presents annual reports to the USSR Ministry of Culture and prepares surveys of the state of scientific work.

Management bodies conduct the training and retraining of library personnel on a large scale.

The State plans invariably envisage the establishment of new high and special secondary educational institutions. Today there are 28 institutions of higher learning and 130 special secondary schools in all the Union republics. Annually 20 thous. specialists graduate from these institutions. The planning and training of librarians is accomplished in keeping with the need in diplomaed workers of the libraries of the country.

A quite harmonious system of the raising of the qualification of library employees, conducted on the basis of the All-Union

and republican institutes of advanced traning of workers of culture, attached to the USSR Ministry of Culture and Ministries of Culture of the Union republics, has formed over the years in the country. This system also includes courses offered by regional departments of culture, higher and special secondary educational institutions of culture, republican and regional seminars, conferences and in-service training programmes.

All this makes it possible to organize systematic re-training of all categories of library workers with the object of broadening their professional and general knowledge and raise their ideological and political level.

The duration of study at such courses is from one to two months once every 3-5 years, depending on the category of the empoyees.

The substantial raise in wages favoured the growth of their labour activity and creative initiative, it also removed the fluctuation of man-power.

All measures directed toward the consolidation of management and the conducting of a State-wide policy of library development, described above, do not at all mean that all inadequacies have been removed or that all complex problems have been solved. A number of important aspects in the work of libraries need to be more firmly regulated, some additional State regulations, defining the general principles of their activity are also necessary. To the more complex problems, which need to be solved theoretically and represented in interdepartmental documents pertain the following:

principles and normatives of development of the network of special libraries; ways and means of interdepartmental centralization and cooperation of libraries of different types; coordination of methodological and bibliographical activities of libraries on the All-Union, republican and regional level; statute of union catalogues; regulations dealing with the creation of State-wide automatic library systems, etc.

The library management system needs to be further improved. It must guarantee the realization of a uniform State policy and close coordination of actions of ministries, departments and social organizations responsible for the work of libraries. This system must combine centralized planned management with the initiative of local libraries and envisage a clear-cut distribution of rights and duties of ministries, departments and other management bodies of different levels..

The modern scales of library, bibliographic and information services, the necessity to increase operativeness of all these services put forward problems of automation not only in separate libraries but of creation automated systems of management of the whole library networks. Unfortunately the rate of creating automated systems of management in the field of librarianship is much lower than in industries; nevertheless the task of automated management of library networks on the scale of some regions, and in the near future, probably, on the scale of the whole country becomes quite realizable today. Conceptions and programmes of automated systems of acquisition, and literature procession, information and service to readers are being worked out now in the research libraries of the USSR.

126/MAN/1-E

IFLA COUNCIL 1981

Division: Management and Technology

Section:

Management and Technology in Library Associations

by

Robert WEDGEWORTH
Executive Director
American Library Association
Chicago, Illinois, U.S.A.

MANAGEMENT AND TECHNOLOGY IN LIBRARY ASSOCIATIONS

Library associations and associations in general tend to be characterized by great expectations, scarce revenues, and intense competition among competing membership programs. Individual and institutional members come together within library associations to enhance financial support for their institutions and recognition for the profession. They seek to promote better library and information services within the limited human and financial resources available to them. With intense economic pressures affecting libraries around the world, the profession and its institutions will continue to look to library associations in order to pool collective wisdom and current efforts seeking more efficient and effective ways to operate library programs.

It is clear that library associations will continue to grow and flourish as has been recently documented in the International Guide to Library, Archival and Information Science Associations, now its second edition. Between 1976 and 1980, the number of national library associations grew from 317 to 450. The number of journals and newsletters published by library associations grew from 256 to 301. These numbers parallel statistics which have been gathered in the U.S. pointing to an overall growth in association activity over the past twenty years.

This paper intends to examine library management and applications of information technology to libraries from two perspectives. First, library associations can and should utilize modern management methods and new information technology to improve their services to members. These include, but are not limited to, the development of sophisticated planning and budgeting processes, introduction of modern personnel practices, the use of modern information systems to enhance productivity, and improve the quality of association work.

Second, library associations function to advise their constituents on library management practices for operation, personnel, finance, and other areas of activity. Through publications, seminars, and workshops, associations introduce library workers to modern management methods. In addition, several national associations test and evaluate equipment appropriate for library use. The extent to which more library associations around the world would engage in these types of activities will depend very much on the extent to which role and function of associations in the field of library and information services are understood.

Association Activities and Services

In a recent survey conducted by the Institute of Public Policy Studies at the University of Michigan, it documented that the primary activities in which most associations are engaged in the U.S. are:

1. expert information
2. mass communication
3. politics and government
4. organizational support (internal)
5. research and services

These activities are ways in which the associations seek to express their primary purpose and objectives.

The major U.S. IFLA members carry out many activities in these areas in order to meet the needs and interest of their respective membership. The Medical Library Association conducts probably the most extensive program of continuing library education within the U.S. During the past year, MLA offered more than 40 separate and distinct course offerings and intended to update and enhance the knowledge and skills of medical librarians. These courses are taught in various parts of the country by qualified instructors. There is usually a fee charged to individual members for the course, and the members receive certification credit upon successful completion of the course.

The Association of Research Libraries, through its Office of Management Studies, assists its institutional members in assessing their programs and in training research library staff to carry out their specialist programs. In addition, ARL maintains reliable statistics on the operation of research libraries in the U.S. and Canada. The Special Libraries Association conducts one of the few annual salary surveys in the field of librarianship in the U.S. The Association of American Law Libraries actively collects and disseminates statistics on U.S. law libraries, and is currently engaged in developing a new cooperative data base for law libraries called LAWNET.

The American Library Association carries out an extensive publications program and a unique government liaison program with specialist staff responsible for monitoring and commenting upon all federal legislation and administrative regulations that affect the field of library and information services.

Managing Library Associations for Performance

Given the basic purpose of promotion and development of library and information services, the question then becomes how can library associations be managed for performance. Perhaps the key elements of management are not significantly different from that of libraries as institutions. Namely, the primary management effort in library associations should be concentrated in three areas: finance, personnel, and applications of technology.

In a recent article in the Harvard Business Review, a survey of the nation's business leaders, financial experts, and association executives suggested that the major management challenges for the 1980's would be inflation, energy, productivity, government regulations, competitive trade, and public opinion. Of those challenges facing library associations, the key challenges will be inflation and public opinion. Inflation has implications for several of the key management areas for associations.

The increasing cost of personnel, supplies and materials, and of association travel, will affect the ability of library associations to carry out their program in the decade of the 1980's. In general, association trends in the U.S. suggest that most associations are seeking new sources of revenues through the introduction of new member services and the recruitment of additional members. In order to generate more financial support from government and private sources, associations are tending to use the media much more frequently. In this way associations are attempting in a more vigorous manner to influence public opinion.

Finance

Membership dues represents approximately 40% of the revenues from U.S. educational associations in 1980 with some variation depending on whether the membership is for individuals or institutions. (Exhibits I and II) In 1980 total membership dues represented an average of 40% of the revenues for the Medical Library Association, 51% for the Special Libraries Association and 28% for the ALA. (Exhibit III and IV) Not only are membership dues a major source of revenues for most associations, it is the most reliable source of revenues for it represents the commitment of the members to maintain the organization.

In the decade of the 1980's most associations will need to consider other sources of revenues more seriously. Other major sources of revenues for associations are conferences and meetings, short training courses, and the sale of publications. The Medical Library Association's continuing education courses accounted for 18% of its income in 1980 while its Annual meeting was slightly less. Nevertheless, the Annual meeting produced an excess of income over expenditures while the CE courses and syllabi ran a slight loss. For the ALA publishing represents over 50% of its total revenues. The Special Libraries Association's Annual Conference and its publishing program each produced 16% of the total revenues for 1980.

Expenditures

Looking at the distribution of expenses of most associations by objective personnel is the single highest category followed by communications with the membership. In controlling expenditures during inflationary periods it means taking advantage of opportunites to order supplies in advance in order to achieve discounts. It means reducing the amount of travel, multiple communication in the same mailing to members, sending communication by lower cost postal sevices, contracting for services that might otherwise be carried out by more expensive permanent staff, and in general raising the specific question of what programs and services can be reduced or eliminated? Planning and forecasting revenues and expenditures will become a much more common activity among many associations, as the effort to control expenses will be very much dependent on the ability to plan the association's services around reasonable financial projections.

Personnel

In addressing the question of library association personnel the obvious tendency is to focus on those persons who are the full-time or part-time employees of the library association. However, this overlooks the fact that most association work is achieved by the volunteer officers and members of the organization. Effectively managing associations means motivating, organizing, and managing the efforts of both the employees and the volunteer officers and members. It also involves the development of clear job descriptions for volunteer officers as well as employees related to the specific objectives to be achieved by the association in a given period. For the employees of the association (usually consisting of professional as well nonprofessional and support staff), carrying out their duties and responsibilities in a functional way to the association program becomes critical. Regular performance evaluation with respect to the objectives set for each individual staff member during the course of a year is an important, controlled mechanism for achieving the association's objectives within the limitations of its staff and financial resources.

In looking at library associations it is important to recognize that much of the work of the volunteer officers and the employees revolve around the conceptualization of the association's program, effective relations with the members, and maintaing access to needed technical expertise. General association literature points to the primary task for association employees as being to implement the policies of the officers of the association, to keep the members happy, and to carry out the program within the budget. This basic view of the responsibilities of association staff is still sound today.

Technology and Library Associations

Library association work, unlike that of libraries, is essentially office work comparable to many other types of organizations. To the extent that library associations will achieve increased productivity without

significant increases in staff, to the extent that library associations will be able to serve growing membership with more and better quality membership services, the successful application of new information technology must be pursued. Most modern office work may be divided into three categories:

text preparation and communication
acquisition of information
voice communication

A major development in the organization of office work features the use of a work center--a modern version of the typing pool--and the use of remote voice communication. A recent article in the WALL STREET JOURNAL illustrated how office workers may pursue certain tasks at home using a terminal connected to the office.

It is not the purpose of this paper to outline in specific technologies that should be pursued by library associations for their internal operation. The range and variety of sizes and types of libraries associations is too broad to encompass or to suggest a single model. What may be more important is to suggest the limitations involved in the use of technology for most library association activities. Most applications of technology to office situations tend to underestimate the difficulties posed by changing the cultural patterns that define the relationships among workers. Remote dictation, for example, tends to modify the contact between worker and supervisor. It may achieve efficiency but eventually lead to productivity losses due to decreases in worker morale. Certain technologies that are relatively minor in cost allow managers to maintain the essential human contact in offices by creating work centers serving a smaller number of supervisors located in reasonable proximity to the work center. Minor technologies including copying machines, automatic typewriters (commonly called word processing equipment) should be the focus of most interests in the application of information technology to library associations. Low cost methods of mailing communications to members, low cost telephonic communications are also areas for investigation.

The effective application of information technology within the association environment will include maintaining up-to-date, reliable information about members, being able to speedily communicate with officers and members about important information that has become available to the association, and being able to carry out a low-cost, high quality, publications program using whatever advanced technology is available to the association within the printing industry.

Associations Advising Libraries

These aspects of activity for library associations are directly related to the role of the library association in advising and assisting its membership and management and technology. Traditionally, library associations have assisted in defining standards for library operation

including cataloging, classification, and indexing. Library associations have provided forms in which librarians have debated the important aspects of library buildings as well as library education. In extending the influence of library associations into the area of technology it is signficant to recognize that knowledge of the technology is probably not as important as knowledge of the specific environment in which the applications are to take place and the recognition of the difficulties of overcoming cultural patterns that inhibit the introduction of new technologies into the library environment.

Library associations cannot assume knowledge of these special difficulties and must take the lead in making their memberships aware of these problems. For example, many types of information technology are readily available in the industralized countries that may be applied in many other parts of the world. Yet, not much of an effort has been made to test these technologies with respect to the special temperatures and humidity conditions, the problems of varying levels of electrical power, and others that are quite common in many different parts of the world. To the extent that library associations can use the collective influence of the library field to prevail upon manufacturers and distributers of equipment to test and evaluate such pieces of equipment under such conditions, the introduction of new information technologies will be excellerated.

Secondly, recognizing that productivity, worker convenience, and the opportunity to overcome the geography of work stations operates in direct contrast with the relationships that workers have traditionally developed among themselves. Grouping clerical workers together to achieve operating efficiencies separates them from the relationship that secretaries for example have had to their immediate supervisors. Introducing new work flows as a result of computer-based cataloging systems breaks down the communications patterns that catalogers have had among each other. Establishing remote dictation opportunities by telephonic recording devices eliminates the spontaneity appreciated by most individuals in contacting their colleagues.

Nevertheless, all of these technological applications intended to improve productivity and enhance the ability of libraries and library associations to carry out their work are worth pursuing. The extent to which successful applications will be implemented will be very much due to the resolution of the cultural problems associated with the breaking down of traditional work patterns that have been established over the years.

Library associations in the U.S. have developed many specific programs to advise their members on management and technology issues.

Annual conference programs frequently address personnel questions, new applications of technology, and provide exhibitions of new equipment and systems. In a series of research studies sponsored by the Association of Research Libraries the advent of a nation-wide data communication system for interlibrary loans and bibliographic data exchange was explored in

depth. ALA library buildings institutes sponsored by its Library Administration Division jointly with the American Institute of Architects influenced a whole generation of library buildings and equipment in the U.S.

Certainly the online data bases of the National Library of Medicine are well-known. But, the Medical Library Association was a major force in the education of the current generation of biomedical librarians who brought those systems to local health service professionals.

Finally, publications of the associations regularly introduce and explain new concepts and techniques in management and technology. From SPECIAL LIBRARIES to LIBRARY TECHNOLOGY REPORTS, these expensive association services are the backbone of library association communications activity.

It should be clear that the primary task of any library association is survival. If an association cannot count upon being in business for the next year or succeeding years, it certainly cannot bring much support to its individual and institutional members. Therefore the task of creating equitable membership dues programs and of organizing effective conference and meetings become even more important. The economics of support for library associations revolve around these areas of activity plus publication programs.

For example, it is not well understood that the financing of conference and meetings in terms of revenues and expenses tends to be a break even proposition at best. However, with the addition of professional exhibits many conferences and meetings can be made to return income to the association that can in turn be used for additional association programs and services. Where there is extensive government subvention of the programs of library associations, it is important for these organizations to be able to document carefully the expenditures for the various functional activities in order to justify future budgetary support.

All of this brings the question of evaluation of library associations. For illustration, I have included an evaluation score sheet from a publication of the American Society of Association Executives. (Exhibit V) This evaluation program lays out five categories for evaluating library associations. While some of these categories may not be applicable to those associations without headquarters or without full-time employees, it does point out the areas of program and other activities that need careful attention by the officers. Periodic reexamining of the goals and objectives of the association by its officers and directors and attention to its operating bylaws head the list. A review of the major programs and activities lies at the heart of being able to set new directions for library associations. This involves some understanding of the current needs and interests of the institutional and individual members. The appropriate assignment and deployment of association staff, significant attention to the financing of the association, and active monitoring of the space, facilities, and equipment made available to staff complete this evaluation program.

Pehaps the most important challenge in the decade of the 1980's for our field will be to bridge the gap from a traditionally print-oriented educational system and that of an increasingly electronic media-oriented society. Library associations should be in the forefront of assisting their members to deal with bridging this gap. However, a focus on managing service institutions for performance by controlling expenses, enhancing revenues, motivating staff, organizing activities, and publicizing the needs and interests of our constituencies will remain fundamental.

REFERENCES

1. Association Operating Ratios, (Washington DC: American Society of Association Executives, 1980).

2. Fang, Josephine Riss and Songe, Alice H., International Guide to Library, Archival, and Information Science Associations, 2d ed. (New York: R. R. Bowker Company, 1980)

3. Mertes, Louis H., "Doing Your Office Over--Electronically," Harvard Business Review, v.59, no. 2 (March-April, 1981), p. 127-135.

4. McManis, Gerald, et al, Personnel Management in Associations, (Washington, DC: American Society of Association Executives, 1980).

5. Mortenson, Charles, Association Evaluation, (Washington, DC: American Society of Association Executives, 1975).

6. "Computer Terminals Allow More People to Work at Home Instead of Commuting," Wall Street Journal, (August 4, 1981), p.48.

Geographical Scope: All
Membership Type: Corporate Associations in Education
Budget Group: All

Income: Respondents: 71

	Average	Median	Midrange	Total Dollars
1. Dues-Regular	46.7%	43.8%	26.8-69.1%	$ 43,046,565
2. Dues-Associates	3.1	.0	.0-2.4	$ 1,022,579
3. Special Payments	.3	.0	.0-.0	$ 70,320
4. Educational Programs	5.0	1.0	.0-6.3	$ 6,327,165
5. Cert./Accred./Std.	.8	.0	.0-.0	$ 2,128,451
6. Meetings & Conv.	10.6	5.5	.0-13.1	$ 9,065,830
7. Exhibits	3.0	.0	.0-2.5	$ 1,159,038
8. Pubs./Adv.	3.4	.8	.0-2.8	$ 9,921,334
9. Pubs./Subs.	4.4	.0	.0-3.0	$ 5,892,195
10. Pubs./Other Sales	4.4	1.0	.0-3.8	$ 4,158,080
11. Insurance Programs	.6	.0	.0-.0	$ 368,065
12. Grants & Cont.	5.0	.0	.0-2.8	$ 2,738,711
13. Investments	5.3	3.1	.9-5.8	$ 4,692,651
14. Other	7.2	2.7	.3-6.9	$ 14,735,976
15. Total Income	100.0%	100.0%	100.0-100.0%	$105,326,960

Expenses by Object: Respondents: 65

16. Personnel Salaries	32.6%	31.0%	21.6-39.5%	$ 29,199,627
17. Pers. Taxes & Benefits	6.4	5.5	3.3-8.8	$ 7,670,655
18. Travel	6.3	5.3	2.3-8.5	$ 5,275,851
19. Occupancy	4.5	3.7	2.2-6.0	$ 4,702,656
20. Communication	13.7	10.4	5.3-18.5	$ 13,893,893
21. Data Processing	1.3	.9	.0-1.8	$ 1,072,346
22. Equip. & Supplies	4.9	3.5	1.9-6.0	$ 9,419,441
23. Acctng. & Legal Fees	1.8	1.1	.5-2.0	$ 1,758,277
24. Addl. Services & Fees	5.4	2.6	.1-5.6	$ 14,187,339
25. Other	15.8	8.3	2.1-23.7	$ 10,742,874
26. Total Expenses	92.7%	97.0%	85.3-101.0%	$ 97,922,959

Expenses by Function: Respondents: 45

27. Exec. & Admin.	29.1%	23.4%	14.9-36.0%	$ 22,131,192
28. Membership	11.1	5.4	1.4-11.9	$ 4,476,314
29. Public Relations	2.3	.0	.0-.8	$ 2,348,525
30. Govt. Relations	2.8	.0	.0-2.5	$ 1,954,498
31. Publications	16.8	9.9	3.4-20.1	$ 16,022,607
32. Conv. & Meetings	9.4	5.5	1.0-11.5	$ 5,132,530
33. Educational Programs	5.4	1.3	.0-9.2	$ 5,450,858
34. Cert./Accred./Std.	2.0	.0	.0-.0	$ 4,662,834
35. Other Programs	13.5	3.7	.0-12.4	$ 16,443,334
36. Total Expenses	92.3%	98.3%	90.4-101.0%	$ 78,622,692

Number of Persons on Staff

Professional Staff	10.6	4.0	2.0-9.3
Clerical Staff	13.2	5.0	2.0-13.3
Total Staff	23.9	12.0	3.0-23.0
Personnel Costs Per Staff Member	$19,445	$19,612	$15,577-$22,458

Source: Association Operating Ratios, ASAE 1980.

Geographical Scope: All
Membership Type: Individual Associations in Educational Professions
Budget Group: All

Income: Respondents: 86

	Average	Median	Midrange	Total Dollars
1. Dues-Regular	39.1%	39.0%	19.1-56.6%	$ 32,559,027
2. Dues-Associates	3.3	.3	.0-3.4	$ 2,057,805
3. Special Payments	2.2	.0	.0-.0	$ 433,178
4. Educational Programs	7.2	3.0	.0-6.7	$ 10,157,380
5. Cert./Accred./Std.	1.0	.0	.0-.0	$ 3,866,096
6. Meetings & Conv.	12.1	9.1	2.1-15.4	$ 7,406,158
7. Exhibits	4.3	1.1	.0-5.8	$ 8,262,130
8. Pubs./Adv.	4.9	1.4	.0-7.2	$ 10,206,518
9. Pubs./Subs.	6.2	.0	.0-7.3	$ 10,365,276
10. Pubs./Other Sales	6.5	1.4	.0-7.7	$ 15,283,097
11. Insurance Programs	1.2	.0	.0-.0	$ 514,139
12. Grants & Cont.	3.0	.0	.0-2.0	$ 4,035,606
13. Investments	4.5	2.5	1.0-4.3	$ 5,210,620
14. Other	4.5	1.9	.5-5.0	$ 4,603,221
15. Total Income	100.0%	100.0%	100.0-100.0%	$114,960,251

Expenses by Object: Respondents: 83

16. Personnel Salaries	28.0%	27.4%	19.8-34.7%	$ 30,131,853
17. Pers. Taxes & Benefits	5.1	4.9	3.1-7.5	$ 6,004,337
18. Travel	6.8	5.0	2.8-8.2	$ 6,446,393
19. Occupancy	4.1	3.5	2.0-5.4	$ 4,437,278
20. Communication	17.8	12.9	7.1-26.7	$ 26,967,698
21. Data Processing	1.5	1.1	.0-2.3	$ 1,663,351
22. Equip. & Supplies	4.4	2.9	1.8-5.2	$ 4,538,338
23. Acctng. & Legal Fees	1.5	1.0	.5-1.8	$ 1,959,761
24. Addl. Services & Fees	5.4	1.7	.0-5.7	$ 6,797,826
25. Other	17.8	9.8	2.6-27.6	$ 19,555,398
26. Total Expenses	92.5%	97.2%	90.0-100.1%	$108,502,233

Expenses by Function: Respondents: 64

27. Exec. & Admin.	26.5%	25.9%	14.3-33.0%	$ 17,449,582
28. Membership	8.9	6.2	2.0-14.4	$ 7,226,750
29. Public Relations	2.1	.0	.0-2.0	$ 1,494,976
30. Govt. Relations	2.3	.0	.0-1.9	$ 1,897,529
31. Publications	19.5	12.7	3.5-34.4	$ 32,010,347
32. Conv. & Meetings	11.5	9.6	3.7-16.1	$ 9,732,424
33. Educational Programs	9.5	3.2	.0-10.8	$ 8,061,112
34. Cert./Accred./Std.	1.6	.0	.0-.0	$ 2,842,657
35. Other Programs	9.0	3.0	.0-9.2	$ 8,113,297
36. Total Expenses	90.9%	96.3%	91.3-100.0%	$ 88,828,674

Number of Persons on Staff

Professional Staff	7.7	3.0	2.0-9.0
Clerical Staff	11.9	5.0	2.0-13.5
Total Staff	19.5	10.5	4.0-22.0
Personnel Costs Per Staff Member	$18,305	$17,798	$13,527-$22,029

Source: Association Operating Ratios, ASAE, 1980.

EXHIBIT II

Special Libraries Association, Inc.
Statement of Income, Expenses and Fund Balances
Year Ended December 31, 1980

	Combined (Memo only)	General Fund	Nonserial Publications Fund	Scholarship Fund	Research Grants-in-Aid Fund	Special Programs Fund
Income						
Dues and fees	$455,065	$455,065				
Subscriptions and advertising	140,662	140,662				
Net receipts from conference, less allocation below	139,928	140,653		$ (725)		
Net receipts from education program	24,538	24,538				
Net receipts from mailing list service program	24,619	24,619				
Interest, dividends and net gain on sales of investments	64,839	43,127	$ 2,742	8,844	$ 306	$ 120
Sales of nonserial publications	26,640		26,640			
Gifts	16,666	2,525		12,990		1,250
Miscellaneous	1,793	1,616		177		
	894,749	832,605	29,382	20,986	306	1,370
Costs and expenses						
Allotment of funds to subunits	82,050	82,050				
Salaries, wages and benefits	326,903	325,204		699		
Office services and occupancy costs	134,674	134,674				
Professional fees and services	18,632	18,632				
Travel and entertainment	33,882	33,882				
Member services and promotion	39,448	39,448				
Costs of periodical publication sold, including allocation below	235,628	235,628				
Costs of nonserial publications	39,703		39,703			
Scholarships and stipends	13,500			13,500		
Miscellaneous	7,721	3,623		1,490	2,608	
Depreciation	4,052	4,052				
Allocation to above expenses to						
Costs of periodical publication	(76,307)	(76,307)				
Conference	(36,646)	(36,646)				
Other funds and programs	(33,959)	(56,085)	20,855	1,271		
	788,281	708,155	60,558	16,960	2,608	
Excess of income over expenses before income taxes	96,468	124,650	(31,176)	3,926	(2,302)	1,370
Provision for income taxes (Note 1)	5,800	5,800				
Excess (deficiency) of income over expenses	90,668	118,850	(31,176)	3,926	(2,302)	1,370
Fund balances—beginning	448,706	229,654	105,089	107,455	6,509	
Fund transfers		(3,070)				3,070
Fund balances—end	$539,574	$345,434	$ 73,913	$111,381	$4,207	$4,440

See accompanying notes to financial statements

Source: SPECIAL LIBRARIES, July 1981

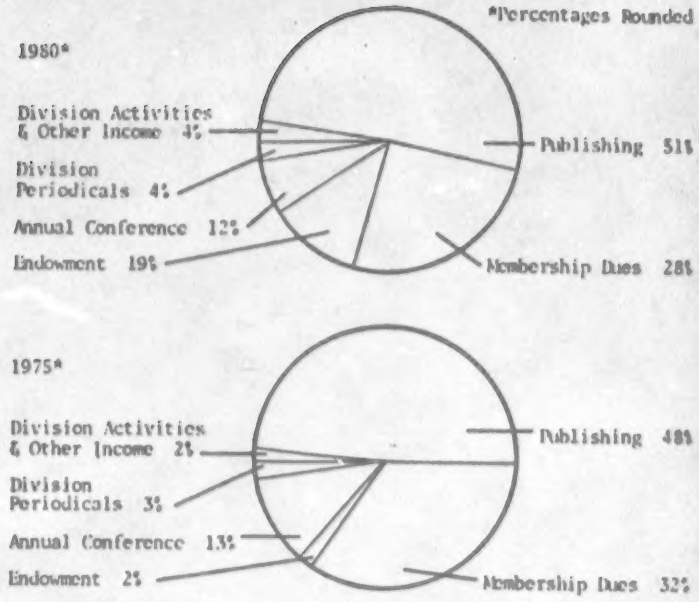
EXHIBIT IV

Fiscal Review In Brief

SUMMARY SOURCE OF INCOME* (fiscal years ending 8/31)

	1980	1979	1975
MEMBERSHIP DUES	2,304,382	1,989,052	1,756,642
ENDOWMENT	116,036	96,466	105,724
ANNUAL ALA CONF.	1,006,200	867,399	708,095
DIVISION PERIODICALS	330,647	295,446	150,866
PUBLISHING	4,201,547	4,035,150	2,655,834
DIVISION SPECIAL ACTIVITIES and Other Income	357,847	179,396	133,432
TOTAL	8,316,659	7,463,909	5,510,593

*Includes all division income but not restricted funds from grants and special projects.



Source: State of the American Library Association, 1981, by Robert Wedgeworth

MEDICAL LIBRARY ASSOCIATION

APPENDIX 1 (Continued)
MEDICAL LIBRARY ASSOCIATION, INC.
EXHIBIT 2
GENERAL FUND
STATEMENT OF INCOME AND EXPENSE
For the Year Ended December 31, 1979

Income			
Dues			
Institutional members	$131,073.30		
Active and associate members	142,289.33		
Sustaining members	1,730.00		
Investment income	28,346.18		
Gain (loss) on sale of investments	(1,478.14)		
Mailing list sales	7,227.47		
Other administrative income	3,074.71		
	$312,262.85		
Bulletin			
Subscriptions	35,827.00		
Advertising	26,241.85		
Back issues	1,022.93		
MLA News subscriptions	1,179.34		
MLA News advertising	900.00		
Directory sales	868.50		
Directory advertising	7,403.75		
Vital Notes subscriptions	12,041.00		
Vital Notes advertising	1,350.00		
Book sales	2,226.75		
Film sales	916.09		
Current Catalog Proof Sheets	23,957.45		
Audiovisual Index sales	5,463.50		
Exchange postage	4,272.94		
Other publications income	1,032.50		
	124,703.60		
Annual meeting	90,688.47		
Continuing education courses	122,502.50		
Sale of syllabi	12,069.00		
Certification fees	6,470.00		
	141,041.50		
Total income	668,696.42		
Expenses			
Administration	164,900.70		
Publications	187,463.15		
Annual meeting	102,929.75		
Continuing education	137,253.19		
Committees	41,037.75		
Total expense	633,584.54		
Excess of income over expense	35,111.88		

Source: BULLETIN, MEDICAL LIBRARY ASSOCIATION, January 1981

EXHIBIT V

EVALUATION SCORE

	Maximum Score	Outstanding	Good	Satisfactory	Unsatisfactory
Part I—Goals and Organization					
*Goals and Objectives	32				
*Officers and Directors	56				
*Bylaws	52				
Sub-Total Part I	140				
Part II—Program and Activities					
*Program and Control and Evaluation	36				
*Conventions and Meetings	16				
*Government Relations	16				
*Education	16				
*Publications	16				
*Public Relations	28				
*Research and Statistics	8				
*Standards	4				
*Other Member Services	4				
Sub-Total Part II	144				
Part III—Staff					
*Policies, Procedures, Job Descriptions	28				
*Compensation and Benefits	36				
*Motivation	32				
*Chief Staff Executive	20				
Sub-Total Part III	116				
Part IV—Financing					
*Budgets, Financial Reports, Audits	44				
*Dues and Other Income	32				
*Insurance Coverage	12				
*Reserve	8				
*Membership Development	12				
Sub-Total Part IV	108				
Part V—Headquarters					
*Space and Facilities	60				
*Equipment	40				
Sub-Total Part V	100				
GRAND TOTAL	608				

Source: Charles Mortenson, ASSOCIATION EVALUATION, ASAE, 1975.

142 /UNP/A10/E

State Programme for Bibliography Development
International Symposium on National Bibliography Automation
Principles of Bibliography Development in the ČSR

The state promotion of bibliography development in the ČSSR includes more than 60 years of history. Already in 1918 when our state independence was renewed and the Czechoslovak Republic proclaimed, the national bibliography programme - up to that time framed by corporative iniciative, was taken over by the state hands, its systematic development dating ever since. For the exemplary conception of its institution during the early twenties we are thankfull first to the long-year tradition of national bibliography maintanance both in the Czech lands and in Slovakia, second to the outlook and bibliographic erudition of its modern founder J.L.Živný, an excellent authority on bibliography. From the modest start in a bibliographer's office in 1925 the National Library originated as a part of the Prague University Library. Its task was to collect, conserve and bibliographically process all the nationally printed material as well as publications from abroad, as far as they concerned the Czechoslovak life. In 1935, regarding the newly introduced bibliographical control of production both of Bohemica and Slovacica, the right of legal copy deposit was novelised and arranged in a way adequate to that time situation.

However, the full development of the State Bibliography Program has been reached only after the World War Two, when- together with political changes also the outstanding changes in the field of bibliography were performed.

From the point of view of the Czechoslovak bibliography the fundamental importance lies in application of experience gained

by the first Socialist State, the Soviet Union, who is an exemplary way developed their State Bibliography Programme, already within the first years after the Revolution.

The transformations of the state bibliography are expecially conspicuous in the following lines:

- the generic spectrum of material in evidence has been considerably spread out
- processing of this spectrum greatly increased (most of the books are being annotated and analytical series of the bibliography register have been started)
- equivalence of both components of the national evidence of Czechoslovak printing production consumated after the new federative organisation of the Czechoslovak Socialist Republic in 1968, has been increased.

The State Bibliography Programme is manifested not only in the field of national bibliography, however it is a field of prime importance. In connection with the new assignments in culture and politics, closely bound with the socialist construction programme, almost all lines of bibliography work are developing very actively. Beside the special bibliography departments almost the entire library network is taking part in it.

In 1945-55 there were more than 440 bibliography publications in the Czech Lands alone. Coordination of bibliographical work in our country seemed - under such situation - vital. Therefore, already in 1952, the Ministry of Information and Culture passed a regulation on cooperation of all types of libraries. In 1954, a regulation of that-time Ministry of Culture followed, concerning the coordination of bibliography, the aims being the removal of bibliographic duplicity and the contribution to improved and better-quality bibliography service to readers.

The most important research libraries were trusted with supervision

over the particular sections of bibliography and all libraries had been instructed to report to the national Bibliography Center all the planned bibliography works nad to send in 2 copies of all bibliographies immediately after publication. At the same time, by a new decree of the Ministry of Education there was erected the Coordination and Evidence Center for Bibliography in Research Libraries, under the Bibliography Center of the ČSR, i.e. within the National Library, with the following goals:

1. to secure and record all bibliography works
2. to organise cooperation of both the institutions and individuals in preparing bibliographies on mutually related topics
3. to supervise the elimination of duplicity
4. to supervise the equable uniformity of contents of bibliography
5. to publish the collective (complex) plans of all bibliographies under writing
6. to publish - at least in every three months - a list of all bibliographies published.

At the same time, just about one year later (1955), the Central Library Council (CLC) was erected to serve as an advisory organ of the Ministry of Culture and coordinator of all types of libraries in a uniform network. The Central Library Council took over the iniciative over all fields of library activities. A substantial activity was developed also in the field of bibliography. In the action programme accepted at the constituting session on June 15, 1955 this Council agreed on their assignment as coordinators of bibliography in the nation-wide extent, in all libraries and institutions, and on support to the development of theory and methodology of bibliography. The Council's Section of Bibliography was entrusted with this active program and its staff have recently taken part in all transformations of our bibliography as iniciative and apt advisors.

Vice-Chairman Professor Dr G. Pflug from the German Library in Frankfort upon Main.

Both our Ministries of Culture were acting as sponsors and secured everything thoroughly. Members of the Working Committee were: Mr Aleksejev, TsD (USSR), Associated Professor Cybulski, PhD (Poland), Mr Johnson (Great Britain), Professor Pflug, PhD (FRG), Mr Pomassl, PhD (GDR), Associated Professor Zotova .. (Bulgaria) and Mr Lipovský, Mr Bleha PhD, Mrs Sedláčková PhD, Associated Professor Kábrt PhD and Engineer Korda (Czechoslovakia).

Czechoslovakia presented two papers: the Czech one, titled "Preparatory Programme of the Czech National Bibliography Automation" and a Slovak one, "Automated System of the Contemporary Slovak National Bibliography, its Development, Present Situation and Perspective Development". Further, the following papers were presented and discussed:

"International Exchange of Information and its Influence on National Bibliography Conception" (G. Pflug, German Library, Frankfort upon Main); "Preparation for the Contemporary National Bibliography in Bulgaria", (K. Zotova, The Kiril and Method's Library in Sophia); "Automated System for Processing the Library Information in the Lenin Library", (N.G. Aleksejev - D.M. Kac - B.I. Chutoreckij, Lenin Library in Moskow); "The Italian National Bibliography Automation" (S. Perughinelli, National Library, Florence); "The Automation of the British National Bibliography" (T.J. Johnson, The British Library, London); "Automation of Creative and Control Processes in Bibliography Recording in the Lenin Library" (N.G. Aleksejev - D.M. Lac - B.I. Chutoreckij, The Lenin Library, Moskow); "Automation of the Bio-Medical Periodicals Catalogue in the Swiss Libraries" (P. Keller, Canton and University Library, Lausanne); "Methodological and Organisation Aspects of the Formal and Factual Bibliography

Identification of Literature Documents in Computer Data Processing" (G. Rost, The German Library, Leipzig); "Organisation in the Bibliographical Processing of Documents in the National Library Information System" (Cz. Wrzosien, The National Library, Warszaw; "Data Organisation and Structure in the State Library of Romania" (I. Creteanu - D. Banciu, The Central State Library, Bucarest); "Filing on the Hungarian National Bibliography Records, its Principles and Problems" (M. Sipos, The Széchényi National Library, Budapest); "Automation in the Danish National Bibliography" (E. Balling, The Library Center, Ballerup). At the conclusion, Dr Pflug briefly presented two papers by Mrs D. Anderson, who regretfully apologised for being unable to come: "Universal Bibliographic Control Programme" and "Complementing the Recommendations of the International Congress of National Bibliographies".

The discussion was not only most animated, it was also extraordinarily ample and inspiring.

The participants of the Symposium came to the following conclusions:

1. In order to guarantee efficient use of modern technology in information systems, it will be necessary for national bibliographies in all countries to cooperate in solving the differing problems of subject access on the basis of generally recognised classification systems. This is true also for the further development of systems of rubricators, and information retrieval systems of the descriptor type (thesauri).
2. Of equal importance is the development of standards for the exchange of bibliographic data in information networks, both in off-line systems (a magnetic tape) and in on-line systems (data networks).

3. The exchange of bibliographic information between countries would be simplified by the standardisation of character coding.

4. One of the fundamental problems in the automation of national bibliographies is the necessity of defining what kind of documents should be included in a national bibliography. This problem should be clarified by legal requirements for deposit, and international activity in this area should be speeded up.

5. The participants believe that a future symposium should discuss in more detail the basic equipment needs for the automation of national bibliographies by national libraries and other bibliographic centres.

6. During the introduction of automatic processing into a national bibliography, the relationship with other information systems, such as documentation centres, must be considered.

7. The participants appeal to all library schools to pay particular attention to including in their curricula the organisational and technical aspects of the introduction and application of automatic processes in libraries.

8. The participants request UNESCO to support the introduction of automation into individual national bibliographic systems and to promote programmes aimed at their compatibility.

9. The participants would also like to ask UNESCO to participate in organising other international symposia, conferences, or any other form of international exchange of experiences in the field of national library automation.

The proceedings of the Symposium will be published to enable the results to be used for the introduction, development or

completion of existing systems of automatic processing of national bibliographies.

The society has been and perspectively will be even more increasing their demands on effectivenes of bibliographic instruments in the flow of information. Towards the close of the last Five-Year-Plan, based on negotiations of our first national conference on Bibliography in the ČSR (held in Prague in October 1977), the preparations of a long range programme of development of the Czech bibliography was started according to the points pronounced in the "Principles of Bibliography Development in the ČSR" approved by the Ministry of Culture of the ČSR.

In their introduction to the Evidence Report the "Principles" claim:

"Bibliography as a mean of public accession to information on literature has an important position in the field of science, technology and production development as well as in the sphere of molding the socialistic human conscience, education and study. It forms an important base for literature information and without that it is impossible to develop an effective librarian and bibliography service. Considering the incessantly growing sources of documents and their different types in the field of scientific literature the need to create a complex unit of a bibliography system on both the national and international level is getting more and more conspicuous."

The following suggested measures aim to this goal and they should become one of the master guide-lines for the work in all fields of the Czech bibliography.

A decisive impact is put by the "Principles" on the basic four paragraphs:

a. the sphere of management and organisation in bibliography
b. the problems of unifying their methods and means
c. improvement of the structure and functions of the system of satisfying the users' demands in bibliography
d. invigoration and maintanance of the professional base of the Czech bibliography.

The first task is characterised especially by endeavour to strengthen the role of the State Library of the ČSR as a central library of the unified network of libraries, central regional libraries and network of bibliographical work and bibliography information service, to strengthen their cooperation when the specialised problems of development of the Czech bibliography are solved, and step by step develop and increase their managerial, coordinating and methodological functions to make them helpful where the construction of an integrated system of bibliography information is concerned. This task also endeavours to underline the role of the State Library of the ČSR, responsible for demanding assignments in the field of national bibliography, as the regional and resort systems are unable to fulfill their roles well nor effectively.

The "Principles" in the special part of their master time-plan ask for series of targets relating to national bibliography which is the fundament of our national system and an important linking pin in the international relations of bibliographies. These targets can be successfully solved only with regard to the principles of Universal Bibliographic Control Programme (UBC). The socialist countries proclaimed this programme iniciatively and they are taking an active part in it. This condition is of great impact where international recommendations are introduced and where the national bibliography is brought into accord with particular recommendations

of other socialist states as well as with international standards. This concerns for example the newly prepared Czechoslovak standard of bibliographique description which inevitably must be compatible with the specialised standards of the Council of Mutual Economic Assistance and up to the needed level has to respond to the International Recommendations. (E.G. the ISBD).

From the point of view of the national bibliography the realisation of the Automation of the Czech National Bibliography Project stands in a key position. The national bibliography would thus enter (regarding the technology part) the new period of its development responding the level of a developed socialist society with a well-developed scientific potential and high tradition of culture.

One of the conditions to security of completness and timing of the national bibliography is the complete legal copy deposit. The principles aim to a new edition of legal regulations concerning deposit. The most prefered receiver would be the State Library of the ČSR, representing the central national bibliography.

The series of targets introduced in the "Principles" concerns the improvement of structure and functions of other particular components of our bibliographical system.

Enhancement of cooperation among the central libraries and public libraries, with intention to reach an optimal meeting of readers' demands and desirable scientific and professional level of the recommendative and selective bibliographies endeavours to develop and improve the work in the field of recommendative bibliography.

In the field of regional bibliography the "Principles"

intend to introduce the full validity of all the praticular legal regulations, to integrate the system still more and to unify the methodology of regional bibliography.

The main task in the spreading sphere of specialised bibliography aims to level the disproportions inflicted by the up-to-now uneven development and by their specific integration with internationalsystems of corresponding classes. The "Principles" see their most important instrument to enhance the situation in the increase of the international cooperation of socialist states, in creation of the mutual class bibliographies and at the same time and without delay in integration of bibliography and information on both the national and international level. The coordination and co-operation of libraries with the branch- and specialised systems of scientific and technological information in the field of processing and exploitation of bibliography and information sources is considered a base. Unless this base be satisfactorily solved, the information potential of specialised bibliography can't be improved.

In accordance with the new targets of the Czech bibliography and remodelling of the bibliography curricula at high schools and at universities, in librarian courses and STI courses must be performed to secure fully the relevant theoretical and methodological level as well as a practical measure of knowledge and skills of the bibliography staffs, librarians and scientific informants.

Associated Professor Jiří Kábrt,PhD